

Apple-Works **F** o r u m

The Monthly Publication of NAUG: *The National AppleWorks Users Group*

Volume VIII, No. 2

Five Dollars

TABLE OF CONTENTS

Letters to NAUG	2	Public Domain Update	25
<ul style="list-style-type: none">• How to store 1.44K on AE drives.• Avoid this computer vendor.• How your ImageWriter ribbon works.• How to print selected records.• How to "fix" the Apple-H printer.		<ul style="list-style-type: none">• Five new disks in the NAUG Library.	
General Interest	4	AppleWorks News	26
<ul style="list-style-type: none">• How to create an appointment calendar.• A BASIC program that creates a data base.		<ul style="list-style-type: none">• News from inCider magazine.	
My Favorite Template	11	AppleWorks News	27
<ul style="list-style-type: none">• How to do your taxes in AppleWorks – Part 2		<ul style="list-style-type: none">• News and special offers from Apple Computer, Apple Expo West, and Clear Night Software.	
UltraMacros Primer	17	General Interest	28
<ul style="list-style-type: none">• How to launch your macro sets.• Flowchart: What happens when you launch a macro set.		<ul style="list-style-type: none">• How to fix your own disk drive.	
Printer Primer	20	AppleWorks News	29
<ul style="list-style-type: none">• How to get better output from your laser printer.		<ul style="list-style-type: none">• News from JEM Software.	
My Favorite Macro	22	Members Helping Members	30
<ul style="list-style-type: none">• How to get data base word wrap.		<ul style="list-style-type: none">• How to get help with TimeOut enhancements.	
		Electronic Index Disk Update	31
		NAUG Membership	32
		NAUG Classifieds	32

Support for AppleWorks and ///EZ Pieces Users

System 6 Driver Needed

Dear Cathleen,

Did you know that Applied Engineering's 3.5-inch High Density Drive that can save 1.44K of data on a high density disk under GS/OS 5.0.4 only works as an 800K drive under System 6? Applied's driver for this product does not support 1.44K operation under System 6.

NAUG members who want to use System 6 can use the drive's full 1.44K storage capability by installing Apple's new 3.5-inch high density controller card in their system. But the interface card costs \$150. Can NAUG get Applied to write a System 6 driver for this product?

Ira M. Garvin
Oakdale, New York

[Ed: NAUG spoke with Applied about a System 6 compatible driver that would support 1.44K storage on the company's high density drive. Applied reports that they no longer manufacture the drive but will consider writing a System 6 driver if they can recover the development cost.]

NAUG members who own a high density drive should write to Jeff Costello, Applied Engineering, 3210 Beltline, Dallas, Texas 75234; (214) 241-6060; Fax: (214) 484-1365 to express their interest in such a driver. Please send a copy of your letter to NAUG; we will give your name and address to any third party developers that might consider writing a System 6-compatible high density driver.]

Problems with A.L.I.

Dear Cathleen,

I am writing to describe a problem I am having with A.L.I. Computer Corporation, a dealer of used Apple II equipment. I placed an order with A.L.I.

The **National AppleWorks Users Group (NAUG)** is an association that supports AppleWorks users. NAUG provides technical support and information about AppleWorks and enhancements to that program. Our primary means of communicating with members is through the monthly newsletter entitled the **AppleWorks Forum**.

after reading about the company in the June 1992 issue of the **AppleWorks Forum**.

A.L.I. immediately cashed my \$500+ check, but three months later I have still not received my computer. I placed repeated calls to A.L.I. but usually get an answering machine.

This treatment appears to be standard company policy and I suggest that NAUG members avoid dealing with A.L.I.

Doug Clark
Michigan Center, Michigan

[Ed: NAUG contacted A.L.I. on behalf of Mr. Clark and the company sent Mr. Clark a computer. That unit proved defective. A.L.I. promised a replacement but took weeks to deliver that system. Like the original, the replacement was defective. Mr. Clark had the necessary minor repairs made locally at his own expense.]

When we told the company that we were going to publish this letter, the President promised to fax us a list of NAUG customers who we could call to verify the quality of the company's service. That list did not arrive as promised.

We urge NAUG members to use credit cards or purchase orders for all mail order purchases and to notify NAUG of any difficulties they experience with mail order dealers. A.L.I. (which now appears to do business as Classroom Computer Corporation) does not accept credit cards. We suggest that NAUG members not do business with this company.]

AppleWorks Forum

Editor: Cathleen Merritt

Associate Editor: Warren Williams

Page Layout: Nanette Luoma

Publisher: The National AppleWorks Users Group

©COPYRIGHT 1993, by NAUG, The National AppleWorks Users Group, for the exclusive use and enjoyment of its members. Any reprint or reproduction must be approved in writing and in advance by NAUG.

The "AppleWorks Forum" (ISSN 0893-4118) is published monthly for \$31 per year by the National AppleWorks Users Group, 49068 Harvest Dr., Plymouth, MI 48170.

Second Class postage paid at Plymouth, MI, and additional mailing offices.
POSTMASTER: Send address changes to AppleWorks Forum, NAUG, Box 87453, Canton, MI 48187

ImageWriter Ribbons

Dear NAUG,

Sometimes my ImageWriter printer uses both the top and bottom of my black ribbons; sometimes it only uses the top of the ribbons. Of course, using both the top and bottom almost doubles the life of my ribbon. How can I "convince" my printer to always use both the top and bottom of its ribbons?

Charles Myler; San Antonio, Texas

[Bruce Shanker replies: It is the ribbon manufacturer, not the ImageWriter, that determines whether you get double-duty from your ribbons.]

Black ImageWriter ribbons have a single twist inside the ribbon case. Each time the ribbon makes one trip through its case, it comes out upside down from the last time it appeared behind the print head. Thus, one time it prints at the top, then it flips around and the next time prints on the bottom. If the manufacturer does not twist the ribbon, the ImageWriter only prints at the top of the ribbon and you get half the print life from the ribbon.]

How to Print Selected Records

Dear Cathleen,

A letter in the August 1992 issue of the **AppleWorks Forum** described how to use AppleWorks' word processor to print complex reports with selected records from your data base file. Here's an approach that only uses AppleWorks data base files:

Duplicate your original data base, insert a blank record, and then delete all the original records. *[Ed: To duplicate a file, save the original data base, issue an Apple-N to change the name of the file, and save the new file. That creates two identical data base files.]* Then prepare your report formats and leave the "empty" data base on the desktop.

When you want to print a selected record or group of records, copy the records to the clipboard, drop them into the "empty" data base, and delete the blank record. That makes it easy to print reports with selected records.

Jack Sonnabaum
Coronado, California

How to "Fix" the Apple-H Printer

Dear Cathleen,

Issuing an Apple-H command no longer prints a copy of my screen. Any idea what's causing my problem?

Shirley Spitz
Ann Arbor, Michigan

[Ed: You must be a teacher, Shirley. Students love to change the AppleWorks defaults and make life difficult for teachers. In this case, someone probably changed your Apple-H printer settings.]

Follow these steps to restore the settings (These are the procedures for AppleWorks 3.0. Skip step #2 if you use an earlier version of AppleWorks):

- 1. With the Main Menu on the screen, select choice #5, "Other Activities".*
- 2. With the Other Activities Menu on the screen, select #6, "Select standard settings for AppleWorks."*
- 3. With the Standard Settings Menu on the screen, select #6, "Specify information about your printer(s)."*
- 4. With the Printer Information Menu on the screen, select #1, "Open-Apple-H printer" and choose your printer from the menu. Then press Apple-Q and press the Escape Key to return to the Main Menu.*

If student pranks are a problem, I suggest that you get John Link's Prevent Disk from NAUG's Public Domain Library. Prevent keeps students from accessing AppleWorks' Other Activities Menu. That keeps them from changing any AppleWorks default settings. Prevent costs \$4 (5.25-inch disk) or \$6 (3.5-inch disk) plus \$2 s/h per order from the NAUG Public Domain Library, Box 87453, Canton, Michigan 48187.

Apple IIGS owners dealing with pranksters should also get Mr. Link's LockOut, a commercial program that keeps students from changing the Apple IIGS Control Panel settings. LockOut costs \$49.95 (including shipping) from SuperStuff, 3382 Sandra Drive, Kalamazoo, Michigan 49004.]

How to Create an Appointment Calendar

by William Roemer and Warren Williams

Many of us use our Apple II computers and AppleWorks to save time and enhance our efficiency. Some of us also like to explore the potential of our computers; we are willing to set efficiency aside in our interest to learn more about our systems.

Readers who enjoy learning more about computing and AppleWorks should find this article interesting. It describes how to use AppleWorks as a BASIC editor and shows you how to use AppleWorks' mail merge feature to create 365 daily calendars like the example in *Figure 1*.

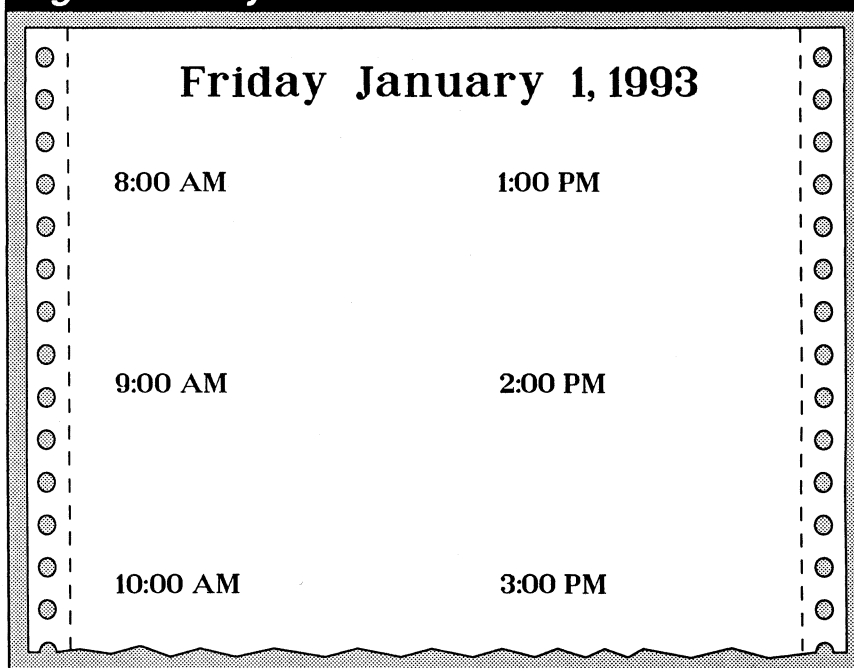
The entire process requires four stages:

1. Use AppleWorks to create a BASIC program.
2. Run the BASIC program that creates a text file with the days and dates of the year.
3. Use the text file to create an AppleWorks data base file with the days and dates of the year.
4. Either (a) print a report from the data base module, or (b) use mail merge to merge the days and dates into a word processor document that contains the format for the final pages.

Using BASIC

The concept of using BASIC to generate data base records is not new; the first author wrote such a program several years ago that worked fine. However, the June 1990 issue of *inCider/A+* included a BASIC program by Michael Seifried with several new features we incorporated into this program. The result is the Applesoft code shown in *Figure 2*. [Ed: A copy of the program also appears on this

Figure 1: Daily Calendar



month's issue of NAUG on Disk, which costs \$10 from NAUG. NAUG on Disk requires a 3.5-inch disk drive.]

Typing the Program

Follow these steps to create the program in AppleWorks:

1. Use a disk utility program such as TimeOut FileMaster, Copy II+, or the Apple IIGS Finder to format a 5.25-inch or 3.5-inch floppy disk. Name the disk /PROGRAM. [Ed: Do not use AppleWorks to format this disk. You cannot create bootable disks with AppleWorks because the AppleWorks formatting routine does not configure the necessary boot tracks on the disk.]
2. Use the utility program to copy ProDOS and BASIC.SYSTEM onto the disk. [Ed: ProDOS and BASIC.SYSTEM come on each month's

Figure 2: BASIC Program that Generates the Data Base

```
10 D$ = CHR$(4): PRINT D$;"PR#3": HOME: TEXT: PRINT
20 DIM DM(12), MY$(12)
30 FOR J = 1 TO 12: READ DM(J): NEXT
40 DATA 31,28,31,30,31,30,31,31,30,31,30,31
50 FOR J = 1 TO 7: READ DW$(J): NEXT
60 DATA "Sunday","Monday","Tuesday","Wednesday","Thursday","Friday"
70 DATA "Saturday"
80 FOR J = 1 TO 12: READ MY$(J): NEXT
90 DATA "January","February","March","April","May","June","July"
100 DATA "August","September","October","November","December"
110 VTAB 2: HTAB 15: PRINT "Appointment Calendar Day/Date Generator"
120 PRINT: PRINT: PRINT: INPUT "Enter Year: ";YR
130 IF YR/4 = INT(YR/4) THEN DM(2) = 29
140 PRINT: PRINT: PRINT "Enter the number of the day on which Jan. 1 falls ";
150 PRINT "and Press <RETURN>:"
160 PRINT: PRINT "1) Sun, 2) Mon, 3) Tue, 4) Wed, 5) Thu, 6) Fri, 7) Sat "
170 PRINT: INPUT "Your answer: ";DW
180 VTAB 22: HTAB 1: PRINT " Please wait..."
190 PRINT D$;"OPEN CAL.DATES": PRINT D$;"CLOSE CAL.DATES"
200 PRINT D$;"DELETE CAL.DATES"
210 PRINT D$;"OPEN CAL.DATES": PRINT D$;"WRITE CAL.DATES"
220 FOR J = 1 TO 12
230 FOR ND = 1 TO DM(J)
240 ND$ = STR$(ND): IF LEN(ND$) < 2 THEN ND$ = " " + ND$
250 GOSUB 320
260 PRINT MY$(J);" ";ND$;" ",YR
270 NEXT ND
280 NEXT J
290 PRINT D$;"CLOSE CAL.DATES"
300 VTAB 22: HTAB 15: PRINT "Done! Textfile 'CAL.DATES' has been created."
310 END
320 IF DW = 8 THEN DW = 1
330 PRINT DW$(DW)
340 DW = DW + 1
350 RETURN
```

issue of NAUG on Disk. You can also find these files on many 8-bit program disks and the Apple II System Disk available from NAUG.] Then set the disk aside and launch AppleWorks.

3. Create a new word processor document called Cal.Basic.
4. Issue an Apple-O command and set all the margins to zero.
5. Type the program in Figure 2. Press the Return Key at the end of each line.
6. Issue an Apple-S command and save the word processor file on the disk that you formatted in step one.

Converting to ASCII

Now you will save the document as a text (ASCII) file on your disk. Continue as follows:

7. Press Apple-P and press the Return Key to print the document from the beginning.
8. Indicate that you want to print "A text (ASCII) file on disk" and press the Return Key.
9. AppleWorks 3.0 users should respond to the "Should the text file have:" message by choosing #3, "Returns after each line". Then press the Return Key.
10. Type the pathname /PROGRAM/CAL.BASIC.A. That names the file "CAL.BASIC.A".

Generating the Program


Now you will use the text file to generate the actual BASIC program. Continue as follows:

11. Quit AppleWorks and boot your computer with the disk you just created. The BASIC prompt ("]") will appear on your screen.
12. Type "PR#3" and press the Return Key to change the display to 80 column mode.
13. Type "-CAL.BASIC.A" to "Execute" the program. A series of BASIC prompts will scroll down the left edge of your screen as BASIC converts the text file into BASIC.
14. Type "RUN". If you typed your program correctly, BASIC will run the program and will ask you to respond to two prompts. Enter the necessary data and press the Return Key. Then type "SAVE

Figure 3: After Importing CAL.DATES

```
File: CALENDAR.DB          REVIEW/ADD/CHANGE          Escape: Main Menu

Selection: All records

Category 01      Category 02
=====
Friday           January  1, 199
Saturday         January  2, 199
Sunday           January  3, 199
Monday           January  4, 199
Tuesday          January  5, 199
Wednesday        January  6, 199
Thursday         January  7, 199
Friday           January  8, 199
Saturday         January  9, 199
Sunday           January 10, 199
Monday           January 11, 199
Tuesday          January 12, 199
Wednesday        January 13, 199
Thursday         January 14, 199
Friday           January 15, 199
=====
Type entry or use  commands          428K Avail.
```

CALENDAR" to save the program on your disk and skip to the paragraph after step #16.

If you made mistakes in your typing, BASIC will report the error and the line number in which it occurred. Write down the line number; you will correct the problem later. Then type RUN XXX (where XXX is the line number immediately following the line in which the error occurred) and press the Return Key to continue the process.

Repeat these steps until you identify each error.

15. Now you will correct the errors. Boot AppleWorks and load the CAL.BASIC file onto the desktop. Correct each error by comparing your file with the code in *Figure 2*. Then issue an Apple-S to save the file and repeat the procedures in steps #6 - 14 to "print" and test the program.

16. After you correct the errors, type "SAVE CALENDAR" from within BASIC to save the program on your disk.

The program you ran created a new text file called CAL.DATES that contains 365 records (366 records for leap years) with two fields in each record. One field contains the day of the week, the other contains the date. You can now use this file to create an AppleWorks word processor or data base file that

will serve as your appointment calendar. In future years, you can boot this disk and type "RUN CALENDAR" to generate a text file for a new AppleWorks calendar.

Creating the AppleWorks Data Base

Follow these steps to use the file to create an AppleWorks data base:

1. Launch AppleWorks and insert the disk with the CAL.DATES file in the active drive. Follow these steps if the drive is not "active":

- A. Choose "Other Activities" from AppleWorks' Main Menu.

- B. Choose option #1, "Change current disk drive or ProDOS prefix" from the Other Activities Menu.

- C. Select the correct drive and press the Return Key. Then press the Escape Key to return to the Main Menu.

2. Choose #1, "Add files to the desktop" to access the Add Files Menu.

3. With the Add Files Menu on the screen, choose #4, "Data Base" and press the Return Key.

4. With the Data Base Menu on the screen, choose #2, "From a text (ASCII) file" and press the Return Key.

5. If you use AppleWorks 3.0, select the text file called "CAL.DATES" and press the Return Key. If you use AppleWorks 2.x, enter the path-name /PROGRAM/CAL.DATES and press the Return Key.

6. Respond to the "Does the text (ASCII) file have:" question by choosing #2, "Return after each category". Then press the Return Key.

7. Respond to the "How many categories per record? (1-30)" prompt by typing a "2". Press the Return Key. Then wait while AppleWorks creates the data base file.

General Interest...

- Press Apple-Y to clear the old file name and enter "Calendar.DB" as the new name. Then press the Return Key.

Your screen will look like the example in *Figure 3*. Do not worry about the missing digits in "1993", AppleWorks will display the dates correctly when you change to single record layout.

Now you will rename the categories and re-format the records. Continue as follows:

- Press Apple-N and the Return Key to highlight Category 01. Press Apple-Y to "yank" the old name and type "Day" as the new name for the category. Then press the Return Key.
- Repeat this process and change the name of Category 02 to "Date". Then press the Escape Key to return to Review/Add/Change mode.
- Press Apple-Z to change to single record layout. Then press Apple-L to display the Change Record Layout screen.
- Press the Down Arrow Key to put the cursor on the letter "D" in the word "Date". Then hold down the Open-Apple Key and press the Right Arrow Key to move the "Date" category several spaces to the right of the "Day" category. Then press the Up Arrow Key to move the "Date" to the same line as "Day". Your screen should now look like the example in *Figure 4*.
- Press the Escape Key to return to Review/Add/Change mode.

Enhancing the Calendar

That completes the basic calendar. Now you can add categories to customize your calendars. For

Figure 4: Change Single Record Layout Screen

File: Calendar.DB	CHANGE RECORD LAYOUT	Escape: Review/Add/Change
	Return or arrows	Move cursor
	⌘ and arrows	Move category location
	⌘-T	Turn inverse names on/off
=====		
Day: Friday	Date: January 1, 1993	

Use options shown above to change record layout.		428K Avail

Figure 5: Labels Format Report

File: Calendar.DB	REPORT FORMAT	Escape: Report Menu
Report: CALENDAR		
Selection: All records		
=====		
Day	Date	
8:00AM:	1:00PM:	
9:00AM:	2:00PM:	
10:00AM:	3:00PM:	
11:00AM:	4:00PM:	
NOON:	5:00PM:	
EVENING:		

Use options shown on Help Screen		428K Avail.

example, you can add categories named "8:00AM", "9:00AM", and so forth. Then you can create the labels format report in *Figure 5* that prints the daily calendar in *Figure 6*.

Each hour (for example, 8:00AM) is a category name. To print the category name, issue an Apple-P to display the report layout, put the cursor on the first character in the category name (in this case, put the cursor on the "8") and press Apple-V. AppleWorks will display a colon after the category name and will print the category name and the colon in your report.

Figure 6: Sample Calendar

○	Friday	January 1, 1993	○
○	8:00 AM:	1:00 PM:	○
○	9:00 AM:	2:00 PM:	○
○	10:00 AM:	3:00 PM:	○
○	11:00 AM:	4:00 PM:	○
○	NOON:	5:00 PM:	○
○	EVENING:		○
○	Saturday	January 2, 1993	○
○	8:00 AM:	1:00 PM:	○
○	9:00 AM:	2:00 PM:	○
○	10:00 AM:	3:00 PM:	○
○	11:00 AM:	4:00 PM:	○
○	NOON:	5:00 PM:	○
○	EVENING:		○
○	Sunday	January 3, 1993	○
○	8:00 AM:	1:00 PM:	○
○	9:00 AM:	2:00 PM:	○
○	10:00 AM:	3:00 PM:	○
○	11:00 AM:	4:00 PM:	○
○	NOON:	5:00 PM:	○
○	EVENING:		○

With the report format still on the screen, issue an Apple-O command and type "PH" to turn off the page headers.

Data Base Limitations

Unfortunately, AppleWorks' data base module imposes two restrictions on your calendars:

1. Unless you use JEM Software's DoubleData, each calendar can contain a maximum of 30 categories and one screen per record. *[Ed: DoubleData lets you create up to 60 categories and two screens per record.]*
2. Tables format reports can contain no more than 15 lines in each printed record. That limits the size of the daily calendars you can print with AppleWorks.

Using the Word Processor

One way to add more categories and print larger pages (like the example in Figure 1) is to transfer

your work into an AppleWorks word processor file. AppleWorks' mail merge feature lets you integrate your word processor and data base files.

Continue with the following steps to use mail merge to produce your calendars:

1. Display the data base file "Calendar.DB" on the screen in multiple record layout mode. (Use the Apple-Z command to toggle between single record layout and multiple record layout.)
2. Press Apple-C and then "T" to copy the records onto the clipboard. Then press Apple-9 to highlight all the records and press the Return Key.
3. Press the Escape Key to return to the Main Menu and create a new AppleWorks word processor file called "Calendar.WP" (to distinguish it from the data base file).
4. Issue an Apple-O command. Set your usual margin settings and the characters per inch setting to "5". Type "CN" to center the text.
5. Type "MM" to define a mail merge category and press the Return Key three times to enter "<Day>" in the document.
6. Repeat step #5 but select category #2, "Date" as the mail merge category.
7. Press the Escape Key to return to the word processor document.
8. Put the insert cursor on the caret (^) in front of the word "Date" and press the Space Bar twice to put two extra spaces between the day and the date at the top of every page.
9. Issue an Apple-O command and set the characters per inch to "10" and issue a UJ ("unjustify") command. Then press the Escape Key to return to your document.

General Interest...

Now you will type the hours into the document. Continue as follows:

10. Issue an Apple-T command, press "C" to create a new tab ruler, and press "N" to remove all the tabs. Then set a left tab in column 30 and press the Escape Key.
11. Press the Return Key twice to leave two blank lines. Then type the hours you want to appear on each page of the schedule. When you are done your screen should look like the example in *Figure 7*.
13. Issue an Apple-P command, press the Return Key to select "Beginning", choose your printer from the Printer Menu, press the Return Key to select "Merge data base items with this document", and indicate the number of copies you want to print.

AppleWorks will print 365 different full-page calendars (366 calendars for leap years), so make certain you have enough paper in your printer.

Printing Selected Calendars

You can also print any sub-set of these calendars; for example, all the calendars for a particular week or month. The trick to printing selected calendars is to copy only the dates you want to print onto the AppleWorks clipboard before you perform the mail merge operation. The process is different than you might expect because AppleWorks does not recognize that you entered dates into the Date category. Thus, you cannot use the Apple-R command to select records between the dates you specify.

Follow these steps to print selected calendars:

1. With the word processor template and the CAL.DATES data base on the desktop, display the data base file on the screen.
2. Use the Apple-F command or scroll to put the cursor on the first record you want to print.

Figure 7: Mail Merge Screen

File: Calendar.WP	REVIEW/ADD/CHANGE	Escape: Main Menu
-----<-----		
-----Chars per Inch: 5 chars		
-----Centered		
^<Day> ^<Date>■		
-----Chars per Inch: 10 chars		
-----Unjustified		
-----Tab Ruler		
■		
8:00AM^	1:00PM■	
■		
9:00AM^	2:00PM■	
■		
10:00AM^	3:00PM■	
■		

Type entry or use ⌘ commands	Line 20 Column 1	428K Avail.

3. Issue an Apple-C, press "T", and highlight the records you want to print. Then press the Return Key.
4. Issue an Apple-Q and switch to the word processor template.
5. Issue an Apple-P and press the Return Key to select "Beginning".
6. Select your printer from the Printer Menu and press the Return Key three times to indicate that you want to merge the data base categories into the document.

Other Enhancements

NAUG members who use TimeOut SuperFonts can use this template to print the attractive calendars that appear in *Figure 1*. And UltraMacros users can save paper by using John Jordan's macros that print two-sided documents. The macros appeared in the My Favorite Macro column on page 20 of the October 1990 issue of the *AppleWorks Forum*.

[William C. Roemer is an attorney practicing in New Jersey and is also admitted to the Bar in the District of Columbia.]

[Dr. Warren Williams is the President of NAUG and is a frequent contributor to the AppleWorks Forum.]

NAUG Specials

from Applied Engineering

Order Today!

Sales:
(214) 241-6060

FAX:
(214) 484-1365

BBS:
(214) 241-6677

AE Floptical Drive is now shipping. AE's Floptical Drive is an external high density 3.5" floppy drive that will read 800K, 1.44MB HD and 21MB Floppy disks. It connects to Iie and IIGS's with C. V. Technologies RamFast SCSI card.

\$479

Vulcan IIGS 40MB Hard Disk - Internal hard disk for the Apple IIGS computer. Vulcan comes with a built-in heavy-duty power supply, internal fan, controller card and Apple's new system 6.0.

\$549

TransWarp GS Accelerator - The proven and reliable TransWarp GS contains an 8K cache and more than doubles the speed of the IIGS.

\$199

TransWarp Accelerator - for the Apple Iie computer. Fits in any peripheral slot and increases the speed to 3.6Mhz. Fully compatible with all hardware and software.

\$89

RamFactor 512K - The Iie memory card that fits in slots one through seven. Fully compatible with AppleWorks and can be used by other programs as a RamDrive. Can expand up to 5MB of memory.

\$99



**Limited Time Special
Call Today!**

(214)-241-6060

AE
APPLIED ENGINEERING
The Apple enhancement experts.
A Division of AE Research Corporation

The Taxman Cometh – Part 2

by Ruth K. Witkin

This is the second of two articles that describe how to create an AppleWorks spreadsheet to prepare your 1992 Federal Income Taxes. The template includes ideas you can use with other spreadsheet models. The author assumes that you created the first part of this template as described in last month's issue of the AppleWorks Forum.

T.S. Eliot must have had April 15th in mind when he wrote "April is the cruellest month". Even though that dreaded day will soon arrive, you still have time to reduce your taxes.

Last month, you entered the labels, numbers, and the first half of the formulas in the income tax spreadsheet in *Figures 1* and *2*. This month, you will enter the rest of the formulas and print the spreadsheet. [Ed: The complete tax template appears on this month's issue of *NAUG on Disk*.]

Completing the Formulas

Start by launching AppleWorks and loading the TAXES92 spreadsheet onto the desktop. Then enter the following formulas (the formula number refers to the formulas in *Figure 2*):

Formula 16: Estimated Tax – Single Filer

Cell: K8 Formula: @IF(F4=H8,@MAX(F27.F29),"")

The "Test" in Formula 16 compares the filing code in cell F4 with the status code in cell H8. If they agree, the "Then" statement takes the largest amount produced by the formulas in the Single Filer Schedule (in cells F27 through F29) and enters the result in cell K8. If they disagree, the "Else" statement enters "invisible" double quotation marks (""), which makes cell K8 look empty.

Support for double-quotes first appeared in AppleWorks 3.0. Substitute a zero for the double quotes if you use an earlier version of AppleWorks; the cells will show a zero instead of looking empty.

Right now, the filing code disagrees with the status code, so the "Else" statement makes the cell look empty.

Copy Formula 16 into cells K9 and K10. Follow these steps:

1. With the cursor in cell K8, press <oa-C> to issue a Copy Command.
2. Press the Return Key twice to confirm "Within worksheet" and "Source".
3. Move the cursor to cell K9, type a period, move the cursor to cell K10, and press the Return Key. Then press "N" for "No Change" for references to cells F4, F27, and F29. Press "R" for "Relative" when AppleWorks highlights "H8". All three cells now look empty.

Formula 17: Estimated Tax – Married Filing Jointly or Surviving Spouse

Cell: K11 Formula: @IF(F4=H11,@MAX(F31.F33),"")

Formula 17 enters the estimated tax for married couples filing jointly or for a surviving spouse. Since the filing code matches the status code, the "Then" statement displays the largest value in cells F31 through F33, in this case a zero. This value (and most of the numbers that will appear when you enter these formulas) will change when you complete the template. When you complete the template this cell will contain 14,537.

Then follow these steps to copy the formula from cell K11 into cells K12 through K16:

1. With the cursor in cell K11, press <oa-C> and press the Return Key twice.
2. Move the cursor to cell K12, type a period, move the cursor to K16, and press the Return Key. Press "N" for "No Change" for references to cells F4, F31, and F33. Press "R" for "Rela-

My Favorite Template...

tive" when AppleWorks highlights "H11". Cells K12 through K16 will look empty.

Formula 18: Estimated Tax – Married Filing Separately

Cell: K17 Formula:

`=IF(F4=H17, GMAX(F35.F37), "")`

Formula 18 enters the estimated tax for married couples filing separately. Follow the instructions above and copy the formula into cells K18 and K19. All three cells will look empty.

Formula 19: Estimated Tax – Head of Household

Cell: K20 Formula:

`=IF(F4=H20, GMAX(F39.F41), "")`

Formula 19 enters the estimated tax for filers who are heads of households. Copy the formula into cells K21 and K22. Once again, all three cells will look empty.

Single Filer – Schedule X Calculations

Rows 26 through 41 in *Figure 2* contain four tax tables. Each table includes three formulas (a, b, and c), one of which calculates the estimated tax based on your taxable income.

Formula 20a: Single Filer (Schedule X)

Cell: F27 Formula:

`=IF(AND(B51>=E27, B51<E28), B51*.15, 0)`

Formula 20a estimates the tax for a single filer. The formula uses the @AND function to establish the income level at which it works. If your taxable income (in cell B51) is greater than or equal to the amount in E27 (zero) and less than the amount in cell E28

Figure 1: Form 1040 Spreadsheet

	A	B
1	TAX FORECAST FOR 1992	
2	=====	
3	INCOME:	
4	Wages, salaries, tips, etc.	72,340
5	Interest income (taxable amount)	4,270
6	Dividend income	550
7	Taxable refund of state and local income taxes	680
8	Alimony received	0
9	Net business/partnership income subject to self-employ tax	10,000
10	Net capital gain or (loss up to \$3000)	1,050
11	Pensions, annuities, IRA distributions (taxable amount)	0
12	Scholarships, prizes, and grants (taxable amount)	0
13	Rents and royalties minus expenses	1,855
14	Farm income or (loss)	0
15	Income from estates and trusts	0
16	Unemployment compensation	0
17	Social Security benefits (taxable amount)	0
18	Other income	0
19	-----	
20	TOTAL INCOME	90,745
21		
22	ADJUSTMENTS TO INCOME:	
23	One-half of self-employment tax	0
24	Deductible IRA contributions (self)	2,000
25	Spouse's IRA deduction	2,000
26	Keogh contributions and SEP deductions (self and spouse)	0
27	Penalty on early withdrawal of savings	0
28	Alimony paid	0
29	Other adjustments	0
30	-----	
31	TOTAL ADJUSTMENTS	4,000
32	-----	
33		
34	ADJUSTED GROSS INCOME (AGI)	86,745
35	=====	
36	OTHER DEDUCTIONS:	
37	Unreimbursed medical/dental expenses (exceeding 7.5% AGI)	0
38	State and local income taxes	1,234
39	Real estate and property taxes	4,555
40	Mortgage and investment interest	1,022
41	Charitable contributions	1,500
42	Casualty and theft loss (exceeding 10% AGI)	0
43	Moving expenses	0
44	Other deductions (exceeding 2% AGI)	0
45	-----	
46	TOTAL OTHER DEDUCTIONS (or standard deduction if greater)	8,311
47		
48		
49		
50	PERSONAL EXEMPTIONS	9,200
51	TAXABLE INCOME	69,234
52	ESTIMATED INCOME TAX	0
53	SELF-EMPLOYMENT TAX OWED ON BUSINESS INCOME	0
54	OTHER TAXES (AMT, retirement plan, other)	0
55	TAX CREDITS (child care, elderly, business, housing, other)	375
56	ESTIMATED TOTAL TAX	0
57	TAX WITHHELD AND ESTIMATED TAX PAID	14,997
58		
59	AMOUNT YOU OWE OR (REFUND)	0
60	=====	

(21,450), the "Then" statement calculates 15 percent of your taxable income. If your taxable

C=D-----E-----F-----G-----H-----I-----J-----K-----L									
1		*** WORK AREA ***							
2	==	=====							
3		EXEMPTIONS ----->	4	SOC SECURITY BENEFITS -->				0	
4		FILING CODE ----->	4	TAX-EXEMPT INTEREST ---->				0	
5		=====							
6		FILING STATUS		CODE	DEDUCTION		EST TAX		
7		-----							
8		Single Filer		1	3,600		16		
9		Same-over 65 OR blind		2	4,500				
10		Same-over 65 AND blind		3	5,400				
11		Married-Filing Jointly/Surv Spouse		4	6,000		17	14,537	
12		Same-one over 65 OR blind		5	6,700				
13		Same-one over 65 AND blind		6	7,400				
14		Same-both over 65 OR blind		7	7,400				
15		Same-both over 65 AND one blind/revse		8	8,100				
16		Same-both over 65 AND both blind		9	8,800				
17		Married-Filing Separately		10	3,000		18		
18		Same-over 65 OR blind		11	3,700				
19		Same-over 65 AND blind		12	4,400				
20		Head of Household		13	5,250		19		
21		Same-over 65 OR blind		14	6,150				
22		Same-over 65 AND blind		15	7,050				
23		=====							
24		TAX SCHEDULES	ESTIMATED INCOME TAX						
25		-----							
26		Table 1 - SINGLE FILER (SCHEDULE X)							
27			0	0	20a				
28			21,450	0	20b				
29			51,900	16,902	20c				
30		Table 2 - MARRIED FILING JOINTLY/SURVIVING SPOUSE (SCHEDULE Y-1)							
31			0	0	21a				
32			35,800	14,537	21b				
33			86,500	0	21c				
34		Table 3 - MARRIED FILING SEPARATELY (SCHEDULE Y-2)							
35			0	0	22a				
36			17,900	0	22b				
37			43,250	17,623	22c				
38		Table 4 - HEAD OF HOUSEHOLD (SCHEDULE Z)							
39			0	0	23a				
40			28,750	15,454	23b				
41			74,150	0	23c				
42		=====							
43		DEDUCTIONS		PERCENT	% OF AGI	AMOUNT	EXCESS		
44		-----							
45		Unreimbursed medical/dental	7.5%		6,496	24 7055	26	559	
46		Casualty or theft loss	10.0%		8,761	25 0		0	
47		Other deductions	2.0%		1,732	980		0	
48		=====							
49		SOCIAL SECURITY TAXABLE CALCULATIONS						SOC SEC EXEMPT	
50		-----							
51		ENTER SS BENEFITS IN K3, EXEMPT INTEREST IN K4				1	25,000		
52		Adj AGI for purposes of tax on SS benefits			0	27 4	32,000		
53		Social Security base amount			0	28 10	0		
54		Taxable Social Security benefits			0	29 13	25,000		
55		=====							
56		SELF-EMPLOYMENT TAXES							
57		-----							
58		Social Security Tax on Self-Employment Income				0	30		
59		Medicare Tax on Self-Employment Income				268	31		
60		=====							

value in cell E29). If your taxable income is at this level, the “Then” statement subtracts \$51,900 from

Figure 3: Schedule Y and Z Calculations

Formula #	Cell	Formula
21a	F31	<code>=IF(AND(B51>=E31,B51<E32),B51*.15,0)</code>
21b	F32	<code>=IF(AND(B51>=E32,B51<E33),(B51-E32)*.28+5370,0)</code>
21c	F33	<code>=IF(B51>=E33,(B51-E33)*.31+19566,0)</code>
22a	F35	<code>=IF(AND(B51>=E35,B51<E36),B51*.15,0)</code>
22b	F36	<code>=IF(AND(B51>=E36,B51<E37),(B51-E36)*.28+2685,0)</code>
22c	F37	<code>=IF(B51>=E37,(B51-E37)*.31+9783,0)</code>
23a	F39	<code>=IF(AND(B51>=E39,B51<E40),B51*.15,0)</code>
23b	F40	<code>=IF(AND(B51>=E40,B51<E41),(B51-E40)*.28+4312.5,0)</code>
23c	F41	<code>=IF(B51>=E41,(B51-E41)*.31+17024.5,0)</code>

taxable income, multiplies the result by 31 percent, and adds a base tax of \$11,743.50. If your taxable income is below \$51,900, the "Else" statement enters a zero.

In this example, formula 20c displays 17,117.

Schedule Y and Z Calculations

These formulas follow the same pattern and philosophy as those in Formulas 20a, b, and c.

Enter the formulas in Figure 3. The formula in cell F32 displays 14,732, the formula in cell F37 displays 17,838, and the formula in cell F40 displays 15,648. The other formulas display zeros.

Calculating Your Deductions

Now you will calculate your itemized deductions. Enter the following formulas:

Formula 24: Medical Deduction Limitation

Cell: I45 Formula: `=B34*G45`

The government lets you deduct medical expenses that exceed 7.5% of your adjusted gross income (AGI). Formula 24 multiplies your AGI (in cell B34) by 7.5% (the amount in cell G45) to determine the amount of medical bills you *cannot* deduct from your income. Your result should be 6,506.

Now issue an <oa-C> and copy formula 24 into cell I47. Copy the reference to cell B34 with "No change" and the reference to cell G45 as "Relative". Your template should display 1,735 in cell I47.

Formula 25: Casualty or Theft Loss

Cell: I46 Formula: `=B34*G46+100`

You can deduct casualty and theft losses that exceed

10% of your AGI. You must also allow for a \$100 deductible for each loss.

Formula 25 calculates the amount of your casualty and theft losses that you *cannot* deduct from your income. Your template should display 8,774 as the result of this calculation.

The \$100 deduction applies to each casualty loss, which you must add to this value if you experience more than one loss during the year.

Formula 26: Deductible Expenses

Cell: K45 Formula: `=IF(I45>0,MAX(J45-I45,0),0)`

This formula calculates the expenses you can deduct from your income.

The "Test" in this formula checks if cell I45 contains an amount greater than zero. A value greater than zero indicates that you entered a medical deduction. If you entered a number, the "Then" statement displays the greater of (a) the amount calculated in cell J45 less the value in I45, or (b) zero. If I45 is equal to or less than zero (that is, if I45 contains a zero or is empty), the "Else" statement enters a zero instead of a negative number in cell K45.

Your result should be 549.

Now use the Copy Command to copy Formula 26 into cells K46 and K47. Respond to all the "No Change/Relative" questions with "Relative". Cells K46 and K47 should display zeros. (AppleWorks 3.0 users can enter an <oa-R> in response to the first "No Change/Relative" question. <oa-R> indicates that all the answers are "Relative".)

Formula 27: Tax on SS Benefits

Cell: I52 Formula: `=IF(K3>0,K3*.5+K4+SUM(B4:B16,B18)-B31,0)`

The "Test" in this formula checks cell K3 to determine if you reported any Social Security income. If cell K3 is greater than zero, the "Then" statement multiplies the Social Security benefits in cell K3 by

My Favorite Template...

50%, adds your other sources of income (from cells B4 through B16 and cell B18), and subtracts your total adjustments (in cell B31) to determine your adjusted AGI for calculating the tax on your Social Security benefits.

If cell K3 contains a zero or is empty, the "Else" statement enters a zero.

Your screen will display a zero after you enter this formula.

Formula 28: Social Security Base Amount

Cell: I53

Formula: `=IF(K3>0,LOOKUP(F4,J51:J54),0)`

The "Test" in this formula checks cell K3. If it finds a value greater than zero (which indicates that you reported Social Security income), the "Then" statement looks up your filing code in the Social Security exemption table (in cells J51 through J54) and enters the corresponding base amount in I53.

If cell K3 contains a zero or is empty, the "Else" statement enters a zero.

Your screen will display a zero after you enter this formula.

Formula 29: Taxable Social Security Benefits

Cell: I54 Formula:

`=IF(I52<=I53,0,ROUND(MIN(K3*.5,(I52-I53)*.5),0))`

The "Test" in Formula 29 checks if the adjusted AGI (in cell I52) is less than or equal to the Social Security base amount (in cell I53). If it is, you do not have taxable Social Security income and the "Then" statement enters a zero in I54.

If the value in cell I52 is greater than the Social Security base amount, the "Else" statement enters the lesser of one-half of your Social Security benefits (from cell K3) or one-half of the difference between your AGI and your Social Security base amount, rounded with no decimal places.

Your screen will display a zero after you enter this formula.

Now enter the amount of income that is exempt from Social Security taxes in cells K51 through K54. Copy those values from *Figure 2*.

Formula 30: SS Tax on Self-Employment Income

Cell: J58 Formula:

`=IF(.9235*B9<400,0,MAX(0,MIN(53400-B4,.9235*B9))*.124)`

If you earn more than \$433 from self-employment (92.35% of your self-employment income must be less than \$400), you must pay 12.4% Social Security tax on the lesser of \$53,400 minus your total income or 92.35% of your self-employment income.

The "Test" statement in Formula 30 checks if 92.35% of the business income in B9 is less than 400. If this is true, the "Then" statement enters a zero in cell J58. Otherwise, the "Else" statement enters whichever is greater: zero (which avoids a negative number from appearing in J58) or the lesser of (a) your total wages in B4 subtracted from 53,400, or (b) 92.35% of the self-employment income in B9. The formula then multiplies this result by 12.4%, the Social Security tax on self-employment.

Your screen will display a zero after you enter this formula.

Formula 31: Medicare Tax on Self-Employment Income

Cell: J59 Formula:

`=IF(.9235*B9<400,0,MAX(0,MIN(125000-B4,.9235*B9))*.029)`

This formula is similar to the formula you just entered into cell J58. The "Test" statement checks if 92.35% of your self-employment income in B9 is less than 400. If this is true, the "Then" statement enters a zero in cell J59. Otherwise, the "Else" statement enters whichever is greater: zero (which avoids a negative number in cell J59) or the lesser of (a) your wages in cell B4 subtracted from \$125,000, or (b) 92.35% of the amount in B9. The formula multiplies this result by 2.9%, the Medicare tax on self-employment. In this example, your result should be 268.

Printing the Spreadsheet

Now you will do the necessary calculations and print your spreadsheet. Follow these steps:

My Favorite Template...

1. Press <oa-K> repeatedly until your spreadsheet looks like the example in *Figures 1* and *2*. (You have to issue two or more <oa-K> commands so your "forward references" (formulas that use the calculations produced by later formulas) calculate correctly.

2. Press <oa-S> to save your work.

3. Press <oa-O> and change the print settings as follows:

LM (Left Margin): .7

RM (Right Margin): .7

CI (Chars per Inch): 12

Then press <oa-S> to save the settings, which also returns the spreadsheet to the screen.

Now you will print the spreadsheet. The template requires two pages. AppleWorks will print as many columns as will fit on the first page and then print the rest of the columns on a second page. Continue as follows:

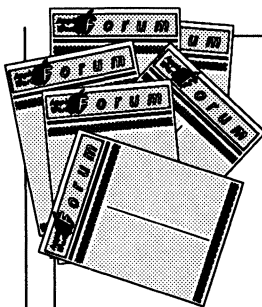
4. Turn on your printer, press <oa-P> and press the Return Key to tell AppleWorks to print "All" of the spreadsheet.

5. Select your printer from the Printer Menu and press the Return Key.

6. Type today's date (or type an "at sign" (@) if you use AppleWorks 3.0) and press the Return Key twice. The printer will whirl away, producing your powerful income tax spreadsheet.

[Ruth K. Witkin wrote the AppleWorks in Action column for inCider/A+ for many years. She is the creator of Success with AppleWorks and Ruth Witkin's Money Manager (both available from A+ Publishing) and is the author of The Best Book of AppleWorks and Personal Money Management with AppleWorks.]

[NAUG on Disk, which comes on a 3.5-inch disk, costs \$10 from NAUG. This month's disk includes AppleWorks 2.x and 3.0-compatible versions of this template.]



Electronic Index Disk

An easy-to-use AppleWorks data base that helps you find the articles you need in the *AppleWorks Forum*. You can:

- Find every article ever printed in the *AppleWorks Forum*.
- Search for a title, an author, or a topic.
- List every article that mentions your printer or software add-on.

The Electronic Index Disk comes on two 5.25-inch disks or a single 3.5-inch disk and costs \$6 plus \$2 s/h. NAUG accepts Visa and MasterCard.

— National AppleWorks Users Group —
Box 87453, Canton, Michigan 48187
(313) 454-1115; Fax: (313) 454-1965

NAUG Policy: Satisfaction guaranteed or your money back

LockOut 2.0

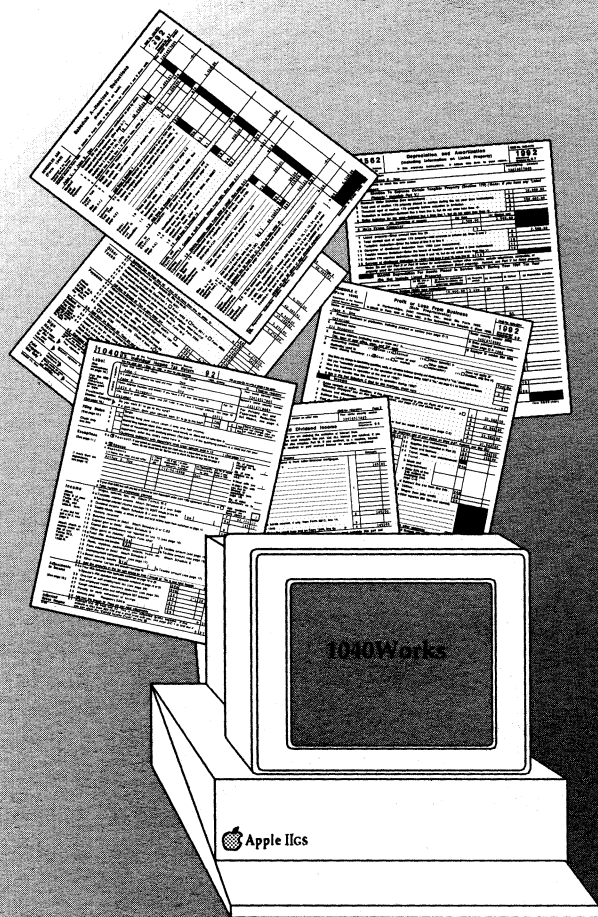
Proven!

Hundreds of schools trust LockOut to save their teachers from hours and hours of frustration.

LockOut prevents students from changing the Control Panel settings on IIGS computers, without disabling any NDA, CDA, or CDev that does not change settings. Includes Installer utility, 40 page manual, and a license to use it on all file servers, hard disks, and floppies in a single building. 90 day unconditional money back guarantee.

\$49.95 from ...

SuperStuff
3382 Sandra Drive
Kalamazoo, Michigan
49004



Now in its
8th year!

1040Works

- fast!
- accurate!
- easy-to-use!

Doing Your Taxes

Nobody looks forward to doing their taxes, but this year you can use AppleWorks and 1040Works to make your job easier ... and even fun.

1040Works is a set of professionally developed AppleWorks templates that compute your Federal Income Tax. You load the files on the AppleWorks desktop, fill in the blanks, and watch 1040Works do its magic. 1040Works prepares and prints 23 of the most widely used Federal Income Tax schedules and forms.

We don't promise that you'll get a tax refund or enjoy doing your taxes, but we do guarantee that

you will be satisfied with 1040Works or we will give you a complete refund.

1040Works costs \$32.95 plus \$3.50 s/h; NAUG members receive a \$3 discount.

Owners of earlier versions of the program can use the special order form they received in the mail to update to the 1992 templates for \$22.95 plus \$3.50 s/h. Also see the special NAUG offer for the 1040Works Tax Planner elsewhere in this insert.

Schedules and Forms

1040Works completes the following Federal Income Tax schedules and forms:

1040	D	SE	2441	8283	8615
A	E	2106	3903	8582	8814
B	F	2119	4562	8582-CR	8829
C	R	2210	6251	8606	

— NAUG Policy: Satisfaction guaranteed or your money back. —

Two Versions of 1040Works

1040Works is compatible with all versions of AppleWorks (except AppleWorks GS) and runs on any Apple II or Apple II-compatible computer that provides at least a 40K AppleWorks desktop.

1040Works-X combines more tax forms in each template and uses fewer templates to produce all 23 tax forms. Thus, 1040Works-X is faster and even easier to use than standard 1040Works.

Order 1040Works-X if you have at least 256K of RAM and AppleWorks 2.0 or later.

Both 1040Works and 1040Works-X complete all 23 forms listed above and include complete documentation. Both products contain macros to help you enter your data. The 1992 editions also include a run-time version of UltraMacros; you do not need a macro program to use the excellent macros on these disks.

1040Works and 1040Works-X will ship by February 5, 1993. Registered users will receive significant discounts on future versions of these products.

What Users Say about 1040Works

"1040Works is so clear and easy to use that I have cancelled my appointment with my accountant."

"1040Works made the chore of doing taxes a lot of fun and turned the grimness into playtime. You did a great job and I thank you again."

"I found the templates fun to use; this was my first attempt doing my taxes on a computer."

"I want to compliment you on the completeness of the templates and ease of use. I learned how to use some of the features of AppleWorks that I had not used before."

"I learned a number of techniques and tips I can use in my own spreadsheets. For just these alone, the price was well worth it."

"A first-class program offering excellent value for the money."

"Yours is an example of good software at a fair price. I am recommending it to my colleagues and customers."

Please send me:

_____ copies of 1040Works @ \$32.95 \$ _____

_____ copies of 1040Works-X @ \$32.95 _____

Shipping @ \$3.50 _____

NAUG Discount @ \$3.00 _____

Total \$ _____

☐ 3.5" Disks ☐ 5.25" Disks

☐ Check ☐ Visa/MC ☐ P.O. # _____

Credit Card # _____

Expiration Date _____

Signature _____

Phone # _____

Name (Please print)

NAUG ID#

Address

City, State, Zip

Mail to: National AppleWorks Users Group
Box 87453, Canton, Michigan 48187
(313) 454-1115; Fax: (313) 454-1965

Prices are in U.S. dollars. Payment must accompany all purchase orders. Foreign orders by credit card only; shipping is additional, specify air mail or surface delivery.

Special Prices
Still Available!

Memory for Your Apple II

Schools —
Upgrade Now!

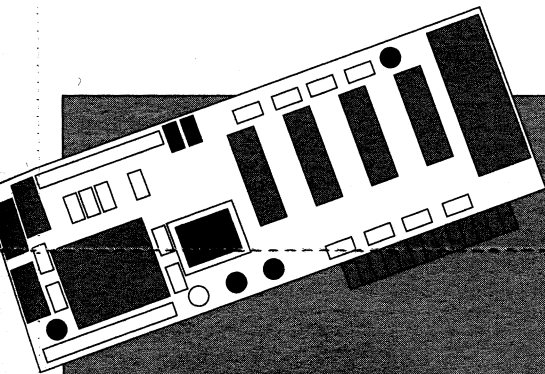
You've waited long enough to upgrade your computers at home and at school! Now you can add memory to your system and never swap disks or get an "Insufficient Memory" error while you work.

NAUG recently negotiated the lowest prices ever offered on high quality memory upgrades for Apple II, II+, IIe, IIC, IIC+, and IIGs computers. These memory cards, manufactured in the USA by Sequential Systems, come with a two year replacement guarantee and free 800-number technical support from Sequential.

Built to industry standards, these easy-to-install memory expansions are automatically recognized by AppleWorks 2.1 and 3.0, AppleWorks GS, Publish It!, and most other applications.

Order your additional memory now. Prices will never be lower.* As with all products you buy from NAUG, we guarantee your complete satisfaction.

*Prices on memory chips are rising dramatically as we go to print. This offer may be discontinued at any time. NAUG will not cash your check or bill your credit card account until we ship your order.



Apple IIe

Sequential's MEG-80z adds 1 megabyte of memory to your Apple IIe. Replaces the 80 column card in your computer.

NAUG special: \$59.95 (List: \$99.95)

Apple IIGs

The RAM-GS is Sequential System's high quality, multi-layer, DMA-compatible expansion card that adds 4 megabytes of memory to your Apple IIGs.

NAUG special: \$129.95 (List: \$249)

Apple IIC

Sequential's RAM IIC adds 1 megabyte of memory to all Apple IIC and IIC+ computers built since 1985. Includes step-by-step installation instructions.

NAUG special: \$109.95 (List: \$199)

— Satisfaction guaranteed or your money back. —

Other Products for Your Apple II*

Super Serial Clone

Sequential's Super-Comm is a full featured serial card that is functionally equivalent to Apple's Super Serial Card. Supports all modems and serial printers. Cable not included.

NAUG special: \$59.95 (List: \$99)

Apple IIe Mouse

Sequential's Bit Mouse adds a mouse interface to your Apple IIe. Includes the interface card, mouse, and cable.

NAUG special: \$69.95 (List: \$129.95)

Parallel Printer Card

A low-cost card that lets you connect a parallel printer to an Apple IIe or IIGS. Includes the cable.

NAUG special: \$39.95 (List: \$55)

Grappler-Clone

A Grappler-compatible parallel interface card for your Apple II, IIe, or IIGS. Includes the cable.

NAUG special: \$49.95 (List: \$79)

Products for Your ImageWriter II*

ImageWriter II Buffer

The Q-Buff is a 32K internal buffer for your ImageWriter II. Speeds up printing from AppleWorks and other text-based applications, but not from AppleWorks GS, SuperFonts, or Publish-It!

NAUG special: \$44.95 (List: \$79.95)

Q-Talk LTO

A LocalTalk adapter that lets you use your ImageWriter II printer on a LocalTalk network.

NAUG special: \$69.95 (List: \$139)

* Allow three weeks for delivery of these Apple IIe and ImageWriter peripherals.

Grappler is a trademark of Orange Micro Inc. Super Serial is a trademark of Apple Computer, Inc. This ad refers to products of companies not included in this list, and exclusion of a product does not imply that trademark protection does not apply. Prices are in U.S. dollars. Payment must accompany all purchase orders. International orders by credit card only; shipping is additional, specify air mail or surface delivery.

Mail or fax to: NAUG • Box 87453 • Canton, Michigan 48187 • (313) 454-1115 • Fax: (313) 454-1965

Order Form

Memory Cards

___ Apple IIGS memory w/ 4 megs @	\$129.95	\$	_____
___ Apple IIe memory w/ 1 meg @	\$59.95	\$	_____
___ Apple IIc memory w/ 1 meg @	\$109.95	\$	_____

Other Products

___ Super Serial Clone	@	\$59.95	\$	_____
___ Apple IIe Mouse	@	\$69.95	\$	_____
___ Parallel Printer Card	@	\$39.95	\$	_____
___ Grappler-Clone	@	\$49.95	\$	_____

ImageWriter II Products

___ ImageWriter II Buffer w/ 32K @	\$44.95	\$	_____	
___ Q-Talk LTO	@	\$69.95	\$	_____

Shipping** \$ _____

Total \$ _____

☐ Check ☐ Visa/MC ☐ P.O. # _____

Credit Card # _____ Exp. Date _____

Signature _____ Phone _____

Name (please print) _____

Address (no P.O. boxes) _____

City, State, Zip _____

**U.S. shipping: \$5 for first item, \$3 each additional item. Maximum \$14.

How to Launch Your Macro Sets

by Randy Brandt

This is the fifth in a series of articles that describes how to use the new features of Ultra 4. The author assumes that you know the basics of TAPL (The AppleWorks Programming Language found in Ultra 4) programming, that you read the prior articles, and that you installed Ultra 4.1 and all its commands in your system.

This article describes macro sets, task files, and how to use the U4 Compiler, U4 Options, and the <launch>, <call>, <link>, <unlink>, <.cache-list>, and <.uncache> commands to manage your macro sets.

What Is a Macro Set?

A macro set is a collection of macros compiled from one source file. You can store a macro set in UM4.0.SYSTEM, in a task file, in a TimeOut application created with U4 Macros2Menus, or you can recompile your macro set from a word processor source file each time you need it. (If you can fit all the macros you need into one macro set, you can store your macros in UM4.0.SYSTEM. Then you do not need multiple sets unless you use TAPL programs written by others.)

To understand macro set management, you must understand “caching” and “task files”.

Caching

A cache (pronounced “cash”) is a storage area. In computer terms, a cache usually refers to disk data stored in RAM. Caching lets your system access data faster. That speeds up the software and reduces disk drive wear.

Ultra 4 automatically uses caching to store up to ten macro sets for instant recall. When you request a new macro set, Ultra tries to cache the existing macro set in desktop memory. It then checks the cache for the new set and, if it is present, instantly loads it from RAM. If the requested set is not in the cache, Ultra loads it from disk and immediately caches it for future use.

Task Files

A task file is a macro set stored on disk along with a “front end” program that lets you launch the file from BASIC or from a program selector. When you launch the task file from outside of AppleWorks, the front end program (a) loads the macro set, (b) loads UM4.0.SYSTEM, (c) sets a flag indicating that a task is running, and (d) turns over control to UM4.0.SYSTEM. The task flag tells Ultra 4 not to install the default macros on top of the task file’s macro set.

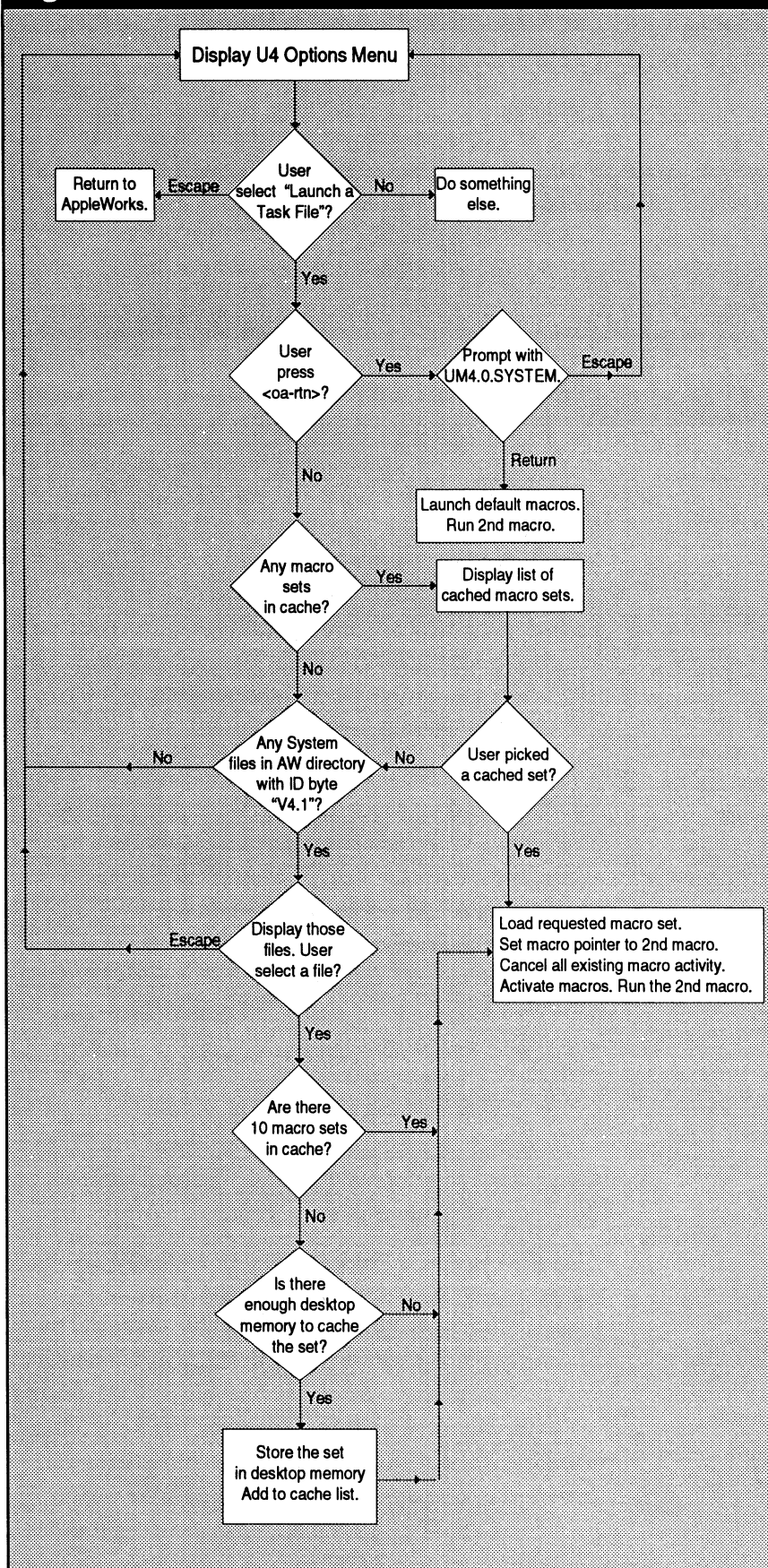
Ultra 4.1 task files know where AppleWorks was located when you created the file. As a result, you can launch task files from any directory on a hard drive; they will still run UM4.0.SYSTEM correctly. If the task file does not find UM4.0.SYSTEM, it assumes that another user created the file and it checks the current directory. If it still does not find UM4.0.SYSTEM, the task finally gives up and generates an error message.

U4 Compiler

Ultra 4 includes three TimeOut applications (U4 Compiler, U4 Options, and U4 Macros2Menus) that let you manage your macros.

The U4 Compiler (which appears on the TimeOut Menu) converts AppleWorks word processor source code into TAPL program code. It starts by checking the cache for the new macro set’s name and, if found, removes the old version of the macro set from the cache. (The compiler does not put the new version in the cache because it is already the active macro set in memory.) The compiler then processes the file and replaces the existing macro set with the new program.

Figure 1: Launch a Task File Flowchart



U4 Options

TimeOut U4 Options (which also appears on the TimeOut Menu) offers three choices you can use to manage your macros:

1. Launch a task file.

This option installs a new macro set in memory. *Figure 1* depicts the flow of operations that occurs when you select this option.

2. Create a task file.

This option saves the current macro set as a task file and does not affect the macro sets stored in the cache. Ultra 4 stores the current startup path in the task file so it can find AppleWorks from any directory when you launch the task file.

The U4 Options creates a binary file if you respond "Yes" to "Create a hidden file" and creates a system file if you respond "No". Hidden files do not appear on the "Launch a Task file" list or on the list of launchable files generated by program selectors. That lets developers create one startup macro set for a TAPL program that includes multiple macro sets and keeps the user from launching the wrong set. It also keeps your task list from getting cluttered with files you do not need to launch.

3. Save macros as default set.

This option automatically changes the current macro set name to "um4.0.system" and stores the macro set in UM4.0.SYSTEM.

U4 Macros2Menus

U4 Macros2Menus is a TimeOut application that converts an existing macro set into a TimeOut application that you can launch from the TimeOut Menu.

UltraMacros Primer...

To use Macros2Menus, you create and debug a macro set and select Macros2Menus from the TimeOut Menu. Macros2Menus will store the new application in your TimeOut directory; it will appear on your TimeOut Menu the next time you launch AppleWorks.

As with other TimeOut applications, the user cannot edit TimeOut modules created with Macros2Menus. Save your original macros so you can edit and modify your work if necessary. Ultra 4 will automatically run the second macro in the set of macros you converted with Macros2Menus.

Ultra 4 Commands

Ultra 4 offers four “traditional” and two “dot” commands that you can use in your macros to manage your macro sets.

<launch>: Ultra 4’s <launch> command works much as it did in UltraMacros 3.x; <launch> loads the macros from the specified task file and then runs the second macro in the set. In Ultra 3 the launch command issued an <oa-Q> to make space available for launching the new macro set. Ultra 4 does not require the <oa-Q>, so Ultra 4 TAPL programs can run smoothly over several macro sets without ever leaving an AppleWorks file.

The syntax of <launch> remains unchanged: <launch “/HD/MACROS/SUPER.MACROS”> will launch the macro set named “SUPER.MACROS” stored in the MACROS subdirectory on the device named “HD”.

<call>: The <call> command is changed significantly in Ultra 4. <call>, which used to work like <jsr>, now executes a specific macro in any macro set you specify. For example, <call sa-a in “test”> launches the “test” task file and runs macro <sa-A>. When it completes <sa-A>, control returns to the current macro within the existing macro set.

<link>: The <link> command works like <call> but does not reload the original macro set after it completes the specified macro. Instead, the new macro set stays in memory.

<unlink>: The <unlink> command restores the original macro set after running macros activated

with the <link> command. The original calling macro then continues execution where it left off.

Dot Commands

<.Cachelist>: The <.Cachelist> command generates a list of the macros currently in the cache and sets variable z to the number of macro sets in the cache.

For example, <.Cachelist 5> stores the number of macro sets in the cache in variable z and stores the names of the cached macro sets in consecutive string variables starting with \$5.

You can use zero for the string number; <.Cachelist 0> sets z equal to the number of cached macro sets but does not capture any of the macro set names.

<.UnCache>: The <.uncache> command removes macro sets from the cache and thus frees up memory. It sets variable z to the number of macro sets removed by its three options:

```
.uncache "macroset" // uncache the named macro set
.uncache ""         // uncache all macro sets in
                   // the cache
.uncache "#"        // uncache all sets EXCEPT
                   // um4.0.system
```

Conclusion

Ultra 4’s caching techniques dramatically accelerate many Ultra 4 operations. Learn how to use these commands and you will be able to create TAPL problems of unlimited size.

The next article will examine Ultra 4’s extended variable commands which let macros use numbers ranging from -21474836.47 to 21474836.47. ■

[Randy Brandt, who owns JEM Software, is the author of TimeOut UltraMacros, Ultra 4, and numerous other AppleWorks enhancements. GENie users can contact Randy in category 34 of A2Pro. Others can write to him at 7578 Lamar Court, Arvada, Colorado 80003, or send a fax to (303) 422-4856.]

How to Get Better Output from Your Laser Printer

by Douglas Gum

This article describes how owners of HP-compatible printers can get better laser printed output from AppleWorks GS, GraphicWriter III, BeagleWrite, and other 16-bit programs running on an Apple IIGs. These techniques will not improve the excellent printouts you already get from programs that use the fonts built into the printer, including your output from AppleWorks Classic. Nor will they improve the generally unimpressive output generated by 8-bit graphics software such as Time-Out SuperFonts and Publish-It!.

I conducted my tests with an Epson EPL-7000 laser printer, but the results should apply to all HP and HP-compatible laser printers.

The Drivers

One of the ways to get better output is to use a third party printer driver available for the Apple IIGs.

Seven Hills Software and Vitesse both market Apple IIGs printer drivers that can enhance your output. Although there are differences in Seven Hills' Independence driver and Vitesse's Harmonie product, both drivers work well with HP-compatible laser printers such as the Epson EPL-7000. I find no difference in the quality of the printed text produced by the two drivers when using the standard menu choices.

However, the two products differ in the number and variety of special effects they support, including the ability to manipulate the height/width proportions of characters and the different methods of shading they use to simulate levels of gray when printing graphics.

A complete review of the differences between these products is beyond the scope of this article.

Each driver lets you specify the quality of the output as measured in dots per inch, and both drivers can print at 75, 150, and 300 dpi. Of course, the 300 dots per inch output is significantly better than the printouts you get at the 75 dpi default setting for these packages. However, specifying 300 dpi output does not automatically produce better output. The actual quality of yours printouts depends on the dots per inch setting you specify and the size of the fonts you install in your system.

Font Sizes

The Apple IIGs (and Macintosh) screen and ImageWriter printers display and print all text at 72 dots per inch, so font developers design their fonts to contain the bitmaps necessary to display text on these 72 dpi devices. Whether you send your output to the screen, to an ImageWriter, or to a high resolution dot matrix printer, each font contains the 72 dpi information and prints at 72 dots per inch.

Of course, the larger the font, the more pixels the font prints on the screen, so the more information the font designer gives your computer and printer about the shape of the characters. Both Independence and Harmonie can use the more detailed information provided for the larger font sizes to print sharper characters at the smaller sizes.

Thus, to get sharper output, you must install larger font sizes in your system and let the printer driver use the information in those font files to produce sharper images at the smaller sizes you print in your document.

For example, consider the examples in *Figure 1* which shows the 75 dpi output produced with the 12-point Times, the 150 dpi output produced by installing 24-point Times in your system, and the

Figure 1: AWGS Output from an HP-Compatible Printer

75 dpi:
The quick brown fox jumped over the lazy dog.

150 dpi:
The quick brown fox jumped over the lazy dog.

300 dpi:
The quick brown fox jumped over the lazy dog.

300 dpi output produced after installing 48-point Times.

As you can see, one of the tricks to better output is to install the fonts that are twice and four times the size you need in your documents.

Memory

Unfortunately, printing at higher resolutions requires more memory in your printer. For example, printing a 150 dpi image requires four times as much memory as a 75 dpi image, and a 300 dpi images requires sixteen times as much memory as a 75 dpi image.

My EPL-7000 (which has only .5-megabytes of memory) can easily print a full page of text at 75 dpi but can only print one-quarter of a page at 150 dpi. That same printer can only print a one-inch by 2.5-inch block of text at 300 dpi.

The EPL-7000 manual suggests that the printer requires at least 1.5 megabytes of memory to print a full page of 300 dpi output. However, I suggest upgrading the EPL-7000 to two megabytes. The amount of memory needed to handle text-intensive pages at 300 dpi may vary slightly from one HP-compatible laser printer to another, but the memory requirements for the EPL-7000 are a good indication of the amount of memory you will need for your own printer.

Speed

As I reported in my earlier review of the Epson EPL-7000 printer [Ed: see the August 1991 issue of the *AppleWorks Forum*], the EPL-7000 offers

impressive speed and clarity when printing from AppleWorks. However, you will have to get used to the slower speed of the high resolution output you can get from AppleWorks GS and other graphic-based problems. Once spoiled by the nearly instant gratification (six pages per minutes) I get from AppleWorks, it was hard to wait one to three minutes for each of my test prints, no matter how nice the result. And remember that these one to three minute delays occurred when I printed the small images I could generate with the .5-megabytes of RAM in my printer; the print times would be significantly longer if I printed full-page images.

The slowness of the printing also bothered me because the majority of the time was used by my IIGs (equipped with a 7-megahertz TransWarp GS card) loading the fonts from disk, rendering the image in memory, and sending the large amounts of graphic data to the printer. The printer seemed to do its part of the job in just a few seconds.

Conclusion

HP-compatible laser printers can give you high-speed attractive output from AppleWorks, or high-resolution graphic and text output when used with AppleWorks GS. Although you cannot get both highest quality and high speed performance at the same time, at least you can get both from the same printer.

[Douglas Gum is the owner of Office Productivity Software and the developer of AmperMacros, TimeOut AboutTime, and TimeOut DiskTools.]

AlphaCheck Plus

Runs inside AppleWorks v3.0

- Double/Single entry Bookkeeping
- Personal/Business
- Full financial & tax reporting
- Post to General Ledger
- Check Writing
- Cash Disbursement Journal
- Chart of Accounts & Vendors Lists
- ...and much more

Price \$68.00 + \$3.50 s/h

ACTASoft

19700 Wells Dr., Woodland Hills, CA 91364; (818) 996-6731

Fun With AppleWorks

- Great games
- New AppleWorks fonts
- Art in AppleWorks
- Spreadsheet fun
- Plus demo for AlphaCheck Plus

Only \$6.00 + \$1.50 s/h

NAUG Special!
AlphaCheck Plus
\$39.95 + \$3.50 s/h

How to Get Data Base Word Wrap

by Roy F. Barrows

One of the limitations of AppleWorks' data base module is its inability to "wrap" long entries from one line to the next. As a result, you must manually press the Return Key when you think that you cannot fit the next word of a long entry into the current category. Then you type the remaining text in the next category. AppleWorks' failure to support data base word wrap makes it difficult to create recipe files and to include lengthy notes in your data base records.

This month's macros add word wrap to the data base module. Specifically, the macros capture any text that will not fit in the current category and put that text in the following category. The macros leave you in the new category ready to enter additional text. *[Ed: These macros also appear on this month's issue of NAUG on Disk, which costs \$10 plus \$2 s/h from NAUG. NAUG on Disk requires a 3.5-inch disk drive. The macros require AppleWorks 3.0 enhanced with UltraMacros 3.1 or Ultra 4.]*

The Logic

AppleWorks sounds an error beep if you try to enter more text than will fit in a category. The macros in *Figures 1* and *2* use UltraMacros' <onerr> command to "listen" for the beep. The macros then move the last text entered in the category down to the next category.

UltraMacros 3.1's handling of the <onerr goto> syntax requires you to divide the subroutine that wraps the text into two separate macros. One subroutine uses <onerr goto> to exit the loop and return to the calling macro. As a result, UltraMacros 3.1 requires three macros to perform word wrap.

Ultra 4's <onerr exit> command lets you break out of the current loop and continue with the next command in the macro. The availability of <onerr exit> lets you add word wrap with only two macros.

How They Work

The <sa-W> macro "listens" for the error beep that AppleWorks sounds if you type too many characters into a category. If you use UltraMacros 3.1, the <sa-W> macro calls the <ba-W> subroutine when it "hears" the beep. The <sa-W> macro immediately calls the <ba-R> subroutine which moves the cursor back to the first empty space it encounters. That puts the cursor after the last complete word in

"These macros add functionality to AppleWorks' data base module."

the category. The macro then reads all the following text in that category into variable \$Ø and returns control to the <ba-W> subroutine. <ba-W> deletes the last segment of text, moves the cursor to the next category, and pastes the text into that category. That

completes the word wrap process, so the macro returns control to the main macro which listens for the next error beep.

The Ultra 4 macros use the <ba-W> subroutine to capture, delete, and wrap the text without calling a separate subroutine.

How to Use the Macros

Follow these steps to use these macros:

1. Add the appropriate macros to your macro file. You can change the macro names to avoid naming conflicts. However, since the macros refer to each other, use the <oa-R> command to

Figure 1: Word Wrap Macros for UltraMacros 3.1

```

W:<adb><                                { Define the macro.                                }
zoom:oa-Z:                              { Force single record layout.                }
msg ' Key <esc> to exit ':              { Display the message.                        }
ahead:                                  { Put the cursor in the next blank space.    }
begin:                                  { Begin a loop that traps your keystroke.    }
onerr goto ba-W:                        { Call ba-W to do the wrapping if the category is full. }
z = key:                                { Store the keystroke in variable z.          }
ifnot z = 27 then print chr$ z:         { If you did not press the Escape Key, "print" the keystroke... }
rpt: endif:                             { ...and "listen" to the next keystroke.      }
if z = 27 onerr off:                    { If the user pressed the Escape Key, stop "listening" for the "beep". }
print chr$ 255:                         { Issue a Return to lock the edited data in place. }
up:                                     { Move the cursor up to the previous category. }
esc:esc:stop>!                          { Restore the screen, and stop the macro.     }

<ba-W>:<asr><                           { Define the subroutine that does the line wrapping. }
ba-R:                                   { Call ba-R to read the excess text.          }
oa-left:                               { Move the cursor back to the last space.      }
oa-Y:                                   { Delete to the end of the category.          }
down:                                  { Go to the next category.                    }
onerr off:                              { Disable error routines.                     }
$Ø = $Ø + chr$ z:                       { Add the last character to variable $Ø.      }
print $Ø:                               { Print the contents of variable $Ø.          }
oa-left:ahead:                          { Put the cursor at the end of the string of text. }
ifnot z = 32 then left:del:              { Delete any excess space character.          }
ahead:                                  { Move the cursor to the end of the text in the category. }
endif:goto sa-W>!                       { Return to the main macro.                  }

<ba-R>:<asr><                           { Define the subroutine that reads the excess text. }
$Ø = "":                                { Clear variable $Ø.                          }
oa-left:                                { Move back to the first empty space.          }
onerr stop:                             { Stop when you get to the end of the category. }
begin:                                  { Begin loop.                                  }
read:rpt>!                              { Read excess text into variable $Ø.          }

```

make certain that you change all the references. Then re-compile your macros. [Ed: See page 19 of the April 1992 issue of the *AppleWorks Forum* for step-by-step directions that describe how to add macros to your existing macro set.]

2. Display an existing AppleWorks data base file on your screen and press <sa-W> to launch the macros. (You cannot use this Macro until you have at least one data base record in the file.) Each keypress will now generate a click as the macro processes each keystroke while it checks if you need word wrap.
3. Press the Escape Key when you want to turn off automatic word wrap and return to normal operation.

The Limits of Word Wrap

These macros provide useful, but limited functionality. Specifically:

1. The macros only work correctly when a category contains at least two words; otherwise it wraps the entire entry into the next category.
2. Any keypress that generates an error will cause word wrap. You must be careful while entering data with the macros active or you will get some "creative" entries in your records.

If you have a problem, press the Escape Key to turn off the macros, fix the problem, and re-start the macros. Do not try to correct any problems with the wrap feature active.

3. The macros add word wrap to every category. For example, there is no way to tell the macros

Figure 2: Word Wrap Macros for Ultra 4.1

```
W:<adb><      { Define the macro. }
.zoomin:      { Force single record layout. }
msg ' Key <esc> to exit ': { Display the message. }
ahead:        { Put the cursor in the next blank space. }
begin:        { Begin a loop that traps your keystroke. }
onerr goto ba-W: { Call ba-W to do the wrapping if the category is full. }
z = key:      { Store the keystroke in variable z. }
ifnot z = 27 then print chr$ z: { If you did not press the Escape Key, "print" the keystroke... }
rpt: endif:   { ...and "listen" to the next keystroke. }
if z = 27 onerr off: { If the user pressed the Escape Key, stop "listening" for the "beep". }
print chr$ 255: { Issue a Return to lock the edited data in place. }
up:           { Move the cursor up to the previous category. }
esc:esc:stop>! { Restore the screen, and stop the macro. }

<ba-W>:<asr>< { Define the subroutine that does the line wrapping. }
$0 = "":      { Clear variable $0. }
oa-left:      { Move back to the first empty space. }
onerr exit:    { Exit the loop when the error beep sounds. }
begin:        { Begin the loop. }
read:rpt:     { Read excess text into variable $0. }
endif:        { This is the end of the loop. }
oa-left:      { Move the cursor back to the last space. }
oa-Y:         { Delete to the end of the category. }
down:         { Go to the next category. }
onerr off:    { Stop "listening" for the "beep". }
$0 = $0 + chr$ z: { Add the last character to variable $0. }
print $0:     { Print the contents of variable $0. }
oa-left:ahead: { Put the cursor at the end of the string of text. }
ifnot z = 32 then left:del: { Delete any excess space character. }
ahead:        { Move the cursor to the end of the text in the category. }
endif:goto sa-W>! { Return to the main macro. }
```

to wrap text within the "Notes" category but not the "Address" category. So an unusually long street address will wrap into a "City" category.

4. The macros divide the text into separate categories; editing the text in any one category has no impact on the entries in any other category. As a result, deleting or adding a word to one category causes blanks or extra words in that category; the macros do not automatically reformat the following categories to eliminate the blanks or accommodate the extra characters.

Users who need to enter and edit long strings of text into data base records should probably consider Gary Hayman's Magic File Cabinet or Steve Beville's DBLink, both of which let you link your data base records to one or more word processor documents that store lengthy text that you want to associate with each record.

But despite their limitations, these useful macros can ease the data entry process with AppleWorks.

[Roy Barrows is a writer and developer of macro-based enhancements for AppleWorks.]

[Magic File Cabinet costs \$15 plus \$2 s/h from Gary Hayman, Magical Software, 8255 Canning Terrace, Greenbelt, Maryland 20770; (301) 345-3230. Maryland residents must add \$.90 sales tax. Add \$.50 s/h to Canada and Mexico and \$2 s/h to other countries. A review of Magic File Cabinet appeared in the November 1991 issue of the AppleWorks Forum.]

[DBLink costs \$10 plus \$2 s/h (Canada and Mexico add \$1, other countries add \$3) from Steve Beville, 3392 Glenn Springs Road, Spartanburg, South Carolina 29302; (803) 582-3687.]

New Disks in the NAUG Library

Barrows' Utilities – Disk 8

NAUG's Public Domain Library now includes the eighth collection of macro-based AppleWorks utilities and tools developed by Roy Barrows. Barrows' Utilities – Disk 8 includes:

Mermack: A fortune telling game that generates messages in response to questions you ask the computer.

NumbrWheel: Produces sets of random numbers for lottery picks and other applications.

Quick.List: Reformats word processor text by putting a Return character at the end of every sentence.

ReturnTools: Adds and deletes Return characters from word processor files. Lets you create multi-column documents and text files you can send by electronic mail.

Space.Make: Adds Return characters to create double-spaced documents for electronic transmission. Can also add extra spaces between words.

Space.Zap: Deletes extra spaces and blank lines from word processor files.

ASP.Grabber: Pastes the contents of spreadsheet cells into word processor and data base files.

ASP.Switch: Switches labels, values, and formulas from rows to columns and columns to rows in the spreadsheet module.

Line.Number: Automatically inserts line numbers in word processor documents.

Set.Length: Controls the length of lines in your word processor document by inserting a Return before any word that exceeds the line length you specify. That lets you format documents without using AppleWorks' Option Menu (which is important if you want to transfer formatted documents in ASCII (text) files).

Barrows' Utilities – Disk 8 includes both TimeOut and task file versions of each utility, word proces-

sor files with annotated copies of the macros, and documentation in an AppleWorks word processor file on the disk. The disk includes both Ultra-Macros 3.1 and Ultra 4.1 versions of the macros and requires AppleWorks 3.0 enhanced with Ultra-Macros 3.1 or Ultra 4.1.

Barrows' Ultra Convert Utilities

The Barrows' Ultra Convert Utilities Disk contains templates and utilities you can use to convert existing macros to Ultra 4.1 and create new Ultra 4.1 macros. The tools include:

M.Template 4.1: A template for creating menu-driven macros.

ReturnTools 4.1: A set of macros that add and delete Returns from your documents.

S.Template 4.1: A template to help you create simple macro sets.

Ultra R.B. 4.1: An edited version of Roy Barrows' Ultra 4.1 default set. This is a treasure chest of useful macros ready to use with Ultra 4.1.

Gloss.Macro 4.1: An alternative to "Glossary" on the TimeOut TextTools Disk.

Key.Tester 4.1: "Grabs" the ASCII value of any key you press or specify on the screen for pasting with <sa-Ø>.

Psn.Msg.Scen 4.1: A set of three macro writing tools including (a) *Posn x,y*: Displays the current x,y position while you move around the screen, (b) *Msgxy*: Displays a msgxy positioning grid anywhere in AppleWorks, and (c) *Screen*: Displays a screen positioning grid anywhere in AppleWorks.

Utils.Task 4.1: A set of menu-driven task file handling utilities that launch (a) any task file in variable \$Ø, (b) any task file typed from keyboard, (c) your default macros from your boot disk, and (d) your default macros from any disk named "APPLEWORKS" in any slot.

Our thanks to Roy Barrows for his continued altruistic contributions to the AppleWorks community.

Formula Club

Formula Club is a game that helps students learn the chemical symbols and formulas. The program displays a chemical symbol or formula and the students type the symbol or the name of the element or compound. Formula Club, which displays all work in large characters that can be read by a group of students, gives students immediate feedback about the accuracy of their response.

Teachers can create their own comments that the program displays in response to right and wrong answers, which livens up the game.

Formula Club runs on any Apple II or Apple II-compatible computer. The program is shareware; you send the author, Preston Boomer, \$10 after ordering the disk from NAUG.

Print Buffers Disk

The NAUG Public Domain Library now includes the Print Buffers Disk, which contains two print buffering programs for Apple IIGS computers. (A print buffer "captures" the output you would normally send to your printer and lets you use your computer while the buffer prints your output.)

NAUG's Print Buffers Disk includes BufferInit, a freeware program by Jeff Noxon that lets you buffer the output from 8-bit programs such as AppleWorks, Publish It!, and Print Shop. William Roemer, who prepared this disk for NAUG, reports that BufferInit releases his computer only three minutes after he gives AppleWorks the command to print a 50-page legal brief on his DeskJet printer.

The Print Buffers Disk also includes GS Buffer, which offers a graphic interface and works with 16-bit programs such as AppleWorks GS. If any NAUG member knows the name of the author of GS Buffer, we want to express our appreciation for his/her work in the *AppleWorks Forum*.

AppleWorks word processor files on the disk provide all the necessary documentation.

Our thanks to William Roemer for preparing this disk for NAUG.

Printer Drivers Disk

NAUG's new Printer Drivers disk makes it easy for members to install new printers in AppleWorks 3.0.

The Printer Driver disk contains 37 SEG.ER files with the printer codes for more than 100 different printers. An AppleWorks data base file on the disk makes it easy to locate the correct file. You then use any utility program to copy the correct file onto your AppleWorks disk or directory and rename the file SEG.ER to install the printer on your system.

Our thanks to the many NAUG members who contributed their SEG.ER files for this disk and particularly to Howard Katz who collected all the work and prepared the data base and documentation files on the disk. Mr. Katz will continue to update this disk as members send him information about their printers.

How to Get Disks

Unless otherwise noted, all disks are available in both 5.25-inch (\$4) and 3.5-inch (\$6) format, plus \$2 s/h *per order*. Order from: Public Domain Library, NAUG, Box 87453, Canton, MI 48187; (313) 454-1115; Fax: (313) 454-1965. NAUG accepts Visa and MasterCard.

AppleWorks News

inCider Emphasizes Its Apple II Coverage

inCider/A+ magazine announced that Dr. Cynthia Field will serve as Consulting Editor and will coordinate the magazine's coverage of new Apple II products, Apple II news, and Apple II product reviews. Dr. Field, who maintains a long-time commitment to the Apple II community, asks developers to keep her informed about new products and news of interest to Apple II users.

[Dr. Cynthia Field, 60 Border Drive, Wakefield, RI 02879; Voice and fax: (401) 782-0380.]

News and Special Offers for NAUG Members

Apple Computer

Apple recently installed Telecommunications Device for the Deaf (TDD) software to provide deaf and hearing-impaired customers with toll-free access to the company's Customer Assistance Center. The Center offers sales information (such as product specifications) and general customer information. The Apple TDD line does not provide technical assistance but can help users locate sources of technical support.

Customers use their TDD equipment to leave their name, phone number, and a short description of their questions. An Apple Customer Assistance Center specialist will respond to the call within one business day. The TDD line operates 24-hours daily. As with all Apple support services, the company asks that you talk with your local dealer before contacting Apple.

[Apple Computer, Customer Assistance, TDD: (800) 833-6223. Voice: (800) 776-2333.]

Apple Expo West

NAUG members should enjoy Apple Expo West, a user conference and show for Apple II and Macintosh users. The show, which will be held at Brooks Hall in San Francisco on April 23 through 25, will include hundreds of presentations and vendor displays. Peter Kelman, Vice President of Scholastic Software and Roger Wagner, President of Roger Wagner Publishing will give keynote presentations at the show.

The low price for booths at the Apple Expo gives Apple II users a chance to see products from developers who cannot afford to participate in larger shows or buy expensive display advertisements. Many developers and vendors will also offer special show discount prices on their products.

Tickets for Apple Expo West cost \$15 through April 1 and then cost \$20. NAUG members who

order their tickets by mail before April 1 receive a \$5 discount and pay only \$10 for their tickets. Include a copy of the back cover of this issue of the *AppleWorks Forum* with your order to qualify for this special NAUG discount.

[Events Specialists, 17 Lilac Road, Sharon, Massachusetts 02067; (617) 784-4531; Fax: (617) 784-1830.]

Clear Night Software

Dan Verkade, developer of 1040Works, TimeOut ReportWriter, DoubleData, TimeOut Grammar, and other AppleWorks enhancements, recently announced the formation of Clear Night Software. The company is currently shipping two products that make TimeOut packages compatible with JEM Software's DoubleData enhancement to AppleWorks.

Clear Night's ReportWriter DBDoublor lets TimeOut ReportWriter use DoubleData-enhanced files. ReportWriter DBDoublor modifies ReportWriter so the program displays all category names in a scrolling list that accommodates up to 60 categories. The program requires ReportWriter 2.52 or later and DoubleData 2.0.

SuperFonts DBDoublor modifies TimeOut SuperFonts so it can produce attractive mail merge documents from DoubleData-enhanced data base files. SuperFonts DBDoublor requires SuperFonts 3.0 or later and DoubleData 2.0.

ReportWriter DBDoublor and SuperFonts DBDoublor each cost \$10 plus \$3 s/h; you can order both products for \$18 plus \$3 s/h. Each product comes with complete documentation in an AppleWorks word processor file on the disk. Indicate whether you want 3.5-inch or 5.25-inch disks and enclose a check with your order; Clear Night Software does not accept credit cards.

[Clear Night Software, 51 Bowen Road, Perris, California 92370.]

How to Fix Your Own Disk Drive

by Scott Johnson and Cathleen Merritt

Disk drive problems are not new for computer owners. The electro-mechanical nature of the disk drive system makes it more likely to fail than the all-electronic design of monitors or the computer itself.

Here are some things to try before you replace or repair a defective disk drive system:

Start by cleaning the drive. You can use any 5.25-inch disk drive cleaning kit that you buy from Radio Shack or from a computer store. Get a cleaning kit that uses a fluid; the wet cleaning systems are less abrasive than the dry systems.

Apple II drives exert pressure on the disk as soon as you close the drive door, so all you need do is put the cleaning fluid on the disk, insert the disk in the drive, and run any program that accesses the drive. Remember that all disk cleaners are abrasive, so do not run the cleaning disk for more than 30 seconds (we recommend a 10 second cleaning). Cleaning twice a year should be adequate for normal use, although some users recommend that you only clean your drives once a year.

If the drive still does not work, check the drive speed. Although repair shops use dedicated diagnostic software, you can use a utility program such as Copy II+ to perform the test. Just launch Copy II+, select "Verify" from the Main Menu, and choose "Drive Speed" from the sub-menu. Select the correct drive, insert a *blank* disk (the test will destroy any data on the disk), and press the Return Key. The drive speed should be between 198 and 202 milliseconds. If you use a utility that displays the speed in RPMs, Apple recommends 300 RPM. However, you will get more consistent performance if you set the speed as close to 298.5 RPM as possible. The allowable range is 296-300 RPM.

Follow these steps to adjust the drive if it is out of that range:

Apple Disk II Drive: Turn off the computer, remove the four screws at the bottom of the drive that hold down the cover and remove the cover. The speed adjusting screw is at the right back corner of the drive when you stand in front of the drive. Look for a small ceramic box with an adjusting screw about half way down the drive on a board that stands on its edge.

Boot up Copy II+, navigate to the Verify Speed option, and adjust the speed while you watch the read-out on the monitor.

Duodisk: You do not have to remove the case on a Duodisk; you access the adjusting screws through holes in the bottom of the case near the disk drive doors. You can set the speed of the drives while they are on their side; the drives work in any position.

Apple IIc: According to the Copy II+ manual, you can also adjust the speed of Apple IIc internal drives without opening the case. You access the adjusting screw through a small hole in the bottom of the case near the disk drive door.

You access the adjusting screw for an Apple IIc external drive by removing the label that covers a small hole in the bottom of the case near the drive door.

Laser 128 and 128EX: You do not have to remove the case on Laser computers. You access the speed adjustment through a small hole on the bottom directly beneath the drive's "in use" indicator light. The factory puts a sticker next to (and sometimes on top of) the correct hole.

Change a Chip

If these options do not fix the problem, buy a 74LS125 chip from an electronics parts store. (The last chips I bought cost 50 cents each.) Remove the case from the drive and replace the original chip on

General Interest...

the top logic board inside the drive. Then try the drive again. Replacing the chip solved the problem on about 90% of the drives we fixed. It seems to act like a fuse and is the first thing to go when something affects the electronics on your system.

Why not keep an extra 74LS125 chip around so you can amaze your friends with your electronic wizardry if their drive quits?

[Scott Johnson is an Apple II enthusiast from Des Moines, Iowa. You can reach him on his electronic bulletin board service: (515) 282-1915 (sysop) or on NAUG's BBS: (615) 359-8238 (Scott Johnson).]

Cathleen Merritt is the Director of NAUG and is the Editor of the AppleWorks Forum.]

Connect with the NAUG Bulletin Board

Call the Electronic Forum, NAUG's popular AppleWorks bulletin board. Be our 80,000th caller and win a year's extension to your NAUG membership. Call (615) 359-8238 at 300, 1200, or 2400 baud.

APPLE[®] EXPO WEST

SAN FRANCISCO BROOKS HALL

APRIL 23-25, 1993

Three days of learning and understanding....

**Featuring the entire Apple and Macintosh Family
of Products and Services**

SEE for yourself what the newest software can do for your Apple and Macintosh computer.

HEAR the latest on new technology from the experts in the computer industry.

TOUCH and feel the incredible power of the entire family of Apple Computers.

For more information on attending or exhibiting
1-800-955-6630 or 617-784-4531 (In Mass.)

The event for Educators, Consumers, and Small Business!

Apple is a registered trademark of Apple Computer. The Apple Expo are not affiliated with Apple Computer.

AppleWorks News

JEM Software Update

JEM Software recently re-aligned its product offerings to focus its efforts on its AppleWorks enhancements. JEM now distributes the following products:

TotalControl 2.1.1, which significantly enhances AppleWorks' data base module, lists for \$60. Upgrades to version 2.1.1 cost \$5.

DoubleData 2.0, which lets you include up to 60 categories in your AppleWorks data base files, lists for \$40. Upgrades to version 2.0 cost \$10.

DB Pix 1.0, which lets you view PrintShop, single hi-res or double-hi-res graphics in AppleWorks data base files, lists for \$25.

OmniPrint 1.0, which lets you control the ImageWriter II and download fonts from within the AppleWorks word processor, lists for \$40.

NAUG members can buy these products directly from JEM for 25% off their regular price. This discount does not apply to product updates. Add \$3 s/h per order. International orders, add \$2. Visa and MasterCard accepted.

Randy Brandt, owner of JEM, recently released version 1.1 of Ultra 4.1. Version 1.1 includes an updated version of DEBUG and fixes bugs in the mathematics dot commands and in some other commands. Owners of earlier versions of Ultra 4.1 can download the update from NAUG's bulletin board or from the NAUG areas on America Online and CompuServe. GENIE users will find these files in the JEM support area on that service. Ultra 4.1 owners without modems can order the update for \$5 (postpaid) directly from JEM.

JEM also announced that it sold the distribution rights for Ultra 4.1 to Quality Computers, which will now be the sole distributor of the product. Quality had not set prices for Ultra 4.1 as this issue went to press.

[JEM Software, 7578 Lamar Court, Arvada, Colorado 80003. Orders and fax: (303) 422-4856; follow the voice prompts to send a fax.]

Help with TimeOut Enhancements

by Nanette Luoma

How to Use this List

Use this month's list to find volunteers who will answer your questions about your TimeOut enhancements. To the left of each volunteer's name are numbers indicating the enhancements that the consultant supports.

1 = DeskTools	9 = SpreadTools
2 = FileMaster	10 = SuperFonts
3 = Grammar	11 = SuperForms
4 = Graph	12 = TeleComm
5 = PowerPack	13 = TextTools
6 = QuickSpell	14 = Thesaurus
7 = ReportWriter	15 = UltraMacros
8 = SideSpread	

		City	Home	Work
Alabama				
1,2,4,6,8-10,13-15	David A. Normand	Fairhope	205-928-2588	
10	Dexter M. Potter	Huntsville	205-881-3359	

Arizona				
1-15	Clay Evitts	Tucson	602-885-9789	602-296-5491

California				
2,4,10	Nancy Albrecht	Canyon Country	805-252-7280	805-252-7280
1-15	James P. Davis	Hayward	510-489-7024	
2,8,10	Cary Hellman	Walnut Creek	510-945-1290	
1-15	Terence Higgins	Newark	510-745-7884	415-593-2500
6,14	Alan E. Kahn	San Anselmo	415-457-9827	
2,8,10,15	Lucien Lacour	Port Hueneme	805-382-1659	
1,2,4-6,8-11,13-15	Will Nelken	San Rafael	415-459-0845	415-456-1798
15	Robert M. Rowe	San Diego	619-277-3227	
7,8	Richard K. Stone	Northridge	818-360-0055	

Colorado				
2,4,8-10,14,15	Lyle Graff	Littleton	303-794-5970	303-977-4557
1-15	Stephen Reiss	Aspen	303-923-6172	303-923-6172

Connecticut				
4,8,10,11	Judson Day	Groton	203-445-6600	
10,14	Sandra Navarra	Danbury	203-743-3533	203-797-4778
10	LynnErna Niebergall	Cornwall Bridge	203-672-6389	

Florida				
1-15	Henry Clay Bailey III	Jacksonville	904-744-2499	904-725-3477
1,2,5,8-11,13-15	Ann Bennett	Orlando	407-843-0545	407-647-6366
2,4,8,10	Thomas J. Stanius	Miami	305-378-6953	305-375-2095
1-15	Jeff Strichard	Ft. Lauderdale	305-587-9590	305-977-4991

Georgia				
1,2,6,10,14	Rick White	Stone Mountain	404-469-0521	404-616-3350

Idaho				
2,10,11,15	Donald H. Campbell	Lewiston	208-743-9639	208-743-8589

Illinois				
10	William Davis	Hinsdale	708-655-9142	708-887-1730
14	David Grayson	Oak Park	708-848-0946	708-573-2760
1,2,4,5,8-11,13-15	Charles Jonaitis	Wilmette	708-256-7871	
2,3,6,14	Howard Katz	Batavia	708-879-5818	708-246-4900

		City	Home	Work
Indiana				
2,4,10	Donald Corson	Memphis	812-256-3517	502-473-3036
1,2,5,6,10,12,14,15	Jack Countryman	Greensburg	812-663-4998	

Iowa				
1,2,4-6,8,10,14,15	Keith King	Ft. Madison	319-372-9521	319-753-6561

Louisiana				
1,2,5,6,8,10,12,14,15	Charles Fryling, Jr.	Baton Rouge	504-766-3120	504-388-1473

Maine				
10	Gerri Moylan	Jefferson	207-549-7365	207-549-7491

Maryland				
1,9,13-15	Gary Hayman	Greenbelt	301-345-3230	
2,4-9,13-15	Tony Mattern	North East	410-658-4799	410-658-5535
1-15	Michael Spurrier	Baltimore	410-298-0263	410-396-0775

Massachusetts				
2,4,8-10,14,15	Marie A. Barry	Beverly	508-927-3736	

Michigan				
2,6,8-10,13,15	James T. Clark	Wyoming	616-243-8361	
14	Sharon A. McCreery	Kalamazoo	616-344-1201	
2,4,8	Michael McMinn	Swartz Creek	313-635-0497	313-232-6541

Minnesota				
2,4,8,10,15	James Hirsch	Coon Rapids	612-421-8393	612-422-5572

Montana				
1,2,4-15	Steve Bernbaum	Shepherd	406-373-6393	

Nevada				
1,2,4-15	Keith Johnson	Sparks	702-626-2543	702-784-4812

New Hampshire				
2,4,7,12,14,15	Andy Albert	Bethlehem		603-823-7411
1,6,8,15	Paul Cuetara	N. Hampton	603-964-8343	603-964-8343

New Jersey				
8,10	Mitch Bernstein	Medford	609-654-1356	
1-15	Pete Crosta	Nutley	201-667-6369	201-677-4080
1,5,8,10,13,14	Gary Hansen	Highland Park	908-819-0017	32512

New Mexico				
4,5,8,13,15	Paul Edwards	Las Cruces	505-525-2708	

New York				
8,10,15	William C. Bates	Tonawanda	716-834-5428	
1,4-10,14,15	Bob Beer	Coram	516-928-6870	
3,4,8,10,11,14,15	Ira M. Garvin	Oakdale	516-563-1253	516-489-7620
12	Amy S. Perry	Arkport	607-295-7932	607-295-7471
8,14,15	Gary C. Walters	Hamburg	716-941-5442	

North Carolina				
6,10	Willard Seehorn	Whiteville	919-642-9722	919-642-7182

Ohio				
1,2,5,6,8-10,13-15	Jason Chao	Cleveland Heights	216-321-5451	215-844-3791
2,3,6,7,10,14	Tom Gwilt	Conneaut	216-593-2216	
2,5,8,14,15	Stephen Hartz	Crestline	419-683-4593	

Oklahoma				
2	George W. Sall	Tulsa	918-747-7018	

Members Helping Members...

		City	Home	Work
Oregon				
1-15	Jim Emig	Portland	503-771-1916	503-280-5676
1,10,13-15	Richard Millus	Medford	503-772-9787	
Pennsylvania				
1-3,5,7-10,14,15	Claude W. Davis, Jr.	Stewartstown	717-993-6874	717-845-3571
2,6,10,15	Hal Shapiro	Eagleville	215-630-8936	
2,5,6,8,14	Marvin Tubbs	Union City	814-438-7281	814-438-3441
Rhode Island				
2,10,14	Richard A. Martone	Warwick	401-739-8698	
1,2,4-6,8,14	Don McCabe	Saunderstown	401-294-6256	508-636-2611
Texas				
8,10	B.H. Hinshaw, Jr.	Arlington	817-274-2740	214-670-2119
1-11,13-15	Ramon F. Merlin	San Antonio	512-496-5331	
1,4,6-8,10,13-15	Bud Simrin	Fort Worth	817-246-0859	
Vermont				
1,2,5,6,8,10,11,13-15	Douglas C. Corey	Middlebury	802-388-6209	802-388-4021
7,10,12,15	John Nunnikhoven	Weston	802-824-6286	
Virginia				
2,4,8,14	Franklin C. Baer	Harrisonburg	703-432-9230	703-433-8652
1-6,8-11,13-15	Wayne Sheffield	Virginia Beach	804-340-6799	
Washington				
1-6,8-15	Kent Hayden	Tacoma	206-566-9467	206-931-2669
2	Nancy Langlow	Bellevue	206-868-7254	206-455-6052
Wisconsin				
1,2,5,6,9,10,12,13,15	Peter W. Lee	Milwaukee	414-344-6807	414-229-6180
1,2,4,5,8-10,14	Lucas Mikkelsen	Glen Flora	715-322-5633	715-532-5511
1,2,4,5,7,8,10,12-15	Scott Peterson	DeKalb	815-748-3876	
Australia				
1-15	D.E. Bruce	Caringbah, NSW	612-527-4731	612-524-3859
1-14	Nicholas Pyers	Elsternwick	61 3 593-2115	
Brazil				
1,2,4,5,7-10,12,15	Paulo Chachamovich	Porto Alegre	051-226-4358	051-225-4778
Canada				
1-6,8-15	Jean Guy Mariage	Montreal	514-922-4566	514-252-2541
1,2,4-10,12-15	Trudy Young	Toronto		416-449-9400
England				
4,5,10,14,15	Andrew C. Letchford	Crownhill	0752-770-178	
France				
7	Henry Marsh	Fontenay Aux Roses	43.50.27.45	
1,2,4,5,8,10,11,13-15	Alain Zimmermann	Palaiseau	1 69 31 07 64	1 49 78 02 88
Israel				
1,2,5,10,13-15	Bernard Katz	Ramat Aviv	03-642-3716	
New Zealand				
5-7,10,12,15	Henry Harrison	St. Lukes, Auk.	9 8469 419	9 4861 491
Switzerland				
1,2,4,6-8,10,14,15	Charles Kubler	Volketswil	01-945-5873	

Electronic Index Update

Electronic Index Update February 93

Enter the default values for these categories: Volume #: 8 • Issue #: 2 •
Date: Feb. 93

Letters to NAUG • 2 • Sytem 6 Driver Needed • Garvin, Ira M. • Applied Engineering; System 6; drives

Letters to NAUG • 2 • Problems with A.L.I. • Clark, Doug • A.L.I. Computer Corporation; hardware

Letters to NAUG • 3 • ImageWriter Ribbons • Myler, Charles • Image-Writer; printing; printers; hardware

Letters to NAUG • 3 • How to Print Selected Records • Sonnsbaum, Jack • printing; data base

Letters to NAUG • 3 • How to "Fix" the Apple-H Printer • Spitz, Shirley • printing; Prevent Disk; LockOut

General Interest • 4 • How to Create an Appointment Calendar • Roemer, William; Williams, Warren • BASIC; data base; calendars; word processor; Mail Merge; SuperFonts

My Favorite Template • 11 • The Taxman Cometh - Part 2 • Witkin, Ruth K. • templates; spreadsheet; taxes; finance

UltraMacros Primer • 17 • How to Launch Your Macro Sets • Brandt, Randy • Ultra 4; UltraMacros; macros; .Cachelist; .UnCache; launch; link; unlink; call; compiler; Macros2Menus

Printer Primer • 20 • How to Get Better Output from Your Laser Printer • Gum, Douglas • laser printers; Apple IIgs; printing effects; printers; Harmonie; Independance; fonts; Epson; Hewlett-Packard

My Favorite Macro • 22 • How to Get Data Base Word Wrap • Barrows, Roy F. • data base; macros; UltraMacros; Ultra 4; Magic File Cabinet; DB Link

Public Domain Update • 25 • New Disks in the NAUG Library • N/A • Barrows Utilities; Barrows Ultra Convert Utilities; Formula Club; Print Buffers; Printer Drivers

AppleWorks News • 26 • inCider Emphasizes Its Apple II Coverage • N/A • inCider; Apple II

AppleWorks News • 27 • News and Special Offers for NAUG Members • N/A • Apple Computer; Apple Expo West; Clear Night Software; Handicapped; ReportWriter; SuperFonts; DoubleData

General Interest • 28 • How to Fix Your Own Disk Drive • Johnson, Scott; Merritt, Cathleen • drives; repairs; hardware

AppleWorks News • 29 • News from JEM Software • N/A • JEM Software; TotalControl; DoubleData; DB Pix; Omni Print; Ultra 4; Quality Computers

Members Helping Members • 30 • Help with TimeOut Enhancements • Luoma, Nanette • DeskTools; FileMaster; Grammar; Graph; Power-Pack; QuickSpell; ReportWriter; SideSpread; SpreadTools; Super-Fonts; SuperForms; TeleComm; TextTools; Thesaurus; UltraMacros

New Keywords: Apple Expo West; Barrows Ultra Convert Utilities; Clear Night Software; .Cachelist; Formula Club; Printer Drivers; .UnCache; launch; link; unlink; call; compiler; Macros2Menus

Help Your NAUG Colleagues

Many NAUG members enjoy the collegiality and satisfaction they derive from helping their AppleWorks colleagues. To join this group of volunteers, contact NAUG and request a "Members Helping Members Volunteer Form" (which also appeared in the June 1992 issue of the *AppleWorks Forum*). We will add your name to our valued support team.

NAUG Membership

Name _____

Member N^o, if renewing _____

Address _____

City _____ State _____

Zip _____ Country _____

Home Phone _____

Work Phone _____

The *AppleWorks Forum* — 12 monthly issues, shipped as follows:

Circle One:	One	Two ¹
	Year	Years
2nd Class postage - United States	\$31	\$62
2nd Class postage - Canada and Mexico	\$41	\$82
1st Class postage - United States	\$47	\$94
1st Class airmail - Canada and Mexico	\$53	\$106
Surface mail outside North America	\$45	\$90
Airmail outside North America	\$68	\$136
NAUG on Disk ²	\$90	\$180

Total \$ _____

☐ Check ☐ MC/Visa ☐ PO # ³ _____

Credit Card Account # _____

Expiration Date _____

Signature _____

¹ Avoids future price increases.

² U.S. Price. Foreign orders by credit card only.

³ Payment must accompany all purchase orders.

NAUG shares members' addresses with other users groups and selected vendors. If you do not want to receive mail from these agencies, check here: ☐

AppleWorks is a trademark of Apple Computer, under license to Claris Corporation.

Apple-Works Forum

NAUG

National AppleWorks Users Group
Box 87453, Canton, Michigan 48187
(313) 454-1115 Fax: (313) 454-1965
BBS: (615) 359-8238

TIME VALUE MATERIAL

Classified Ads

BEST BUY GENEALOGY PROGRAM. Let FAMILY TREE automatically link your family's history into an easy to operate data base. ProDOS based FAMILY TREE is fast, fun, and very user friendly. FAMILY TREE will print a wide variety of outputs to your printer or to AppleWorks files. It even shows family relationships! Imports data from your AppleWorks or LDS PAF data files. For enhanced Ile, Ilc, or Ilgs. YOU GET IT ALL FOR ONLY \$49.95 +\$2.50 S&H (CA add tax). SATISFACTION GUARANTEED! SASE for more information or send check or money order to the author: Robert M. Merrill, 6180 Via Real N-25, Carpinteria, CA 93013-2863.

Guidelines for Contributors

The *AppleWorks Forum* consists entirely of materials contributed by NAUG members. The *AppleWorks Forum* publishes three types of member contributions:

1. Letters: A letter, written to the Editor, that asks or answers a question, shares an idea, or makes a statement.
2. Notes: A note is a brief article or Quick Tip about a single theme.
3. Articles: Articles are generally five to ten double-spaced pages long. Members whose articles are published in the *AppleWorks Forum*, receive a one-year extension to their NAUG membership.

How to Submit Articles to the *AppleWorks Forum*

1. Send paper copies of letters.
2. If possible, send both paper and disk copies of notes and articles. If you do not submit a printed copy, please include a note describing what is on the disk. All submissions become the property of NAUG.
3. All submissions to the *AppleWorks Forum* should include your name, address, and telephone number. We will cite you as the author of the letter, note, or article, but will not include your address or telephone number unless you specifically request that those be published. The Editor will make any necessary editorial changes to your submission. Mail your submission to: Cathleen Merritt, Editor, *AppleWorks Forum*, Box 87453; Canton, MI 48187.

SECOND CLASS
 Postage Paid
 at Plymouth, MI
 and other offices